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National Family Planning Coordinating Board



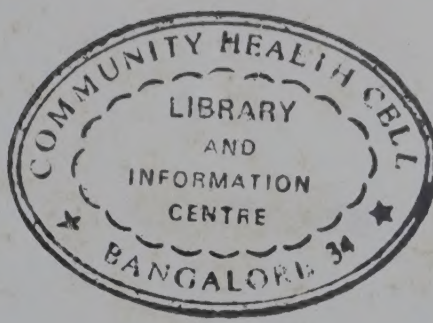
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Demographic and Health Surveys  
Macro International Inc.







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Jakarta, Indonesia

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This report highlights the findings of the 1997 Indonesia Demographic and Health Survey (IDHS) undertaken by the Central Bureau of Statistics in collaboration with the State Ministry of Population/National Family Planning Coordinating Board (NFPCB) and the Ministry of Health (MOH). The DHS Project of Macro International Inc. provided technical assistance and some funding. All of the local costs for the survey were provided by the Government of Indonesia. USAID/Jakarta provided additional funding for technical assistance through Macro International Inc.

The 1997 IDHS is part of the worldwide Demographic and Health Surveys (DHS) program, which is designed to collect, analyze, and disseminate demographic data on fertility, family planning, maternal and child health. Additional information on the 1997 IDHS may be obtained from the Central Bureau of Statistics, Jl. Dr. Sutomo 8, Jakarta 10710, Indonesia (Telephone 345-6285; Fax 384-1545), or the State Ministry of Population/National Family Planning Coordinating Board, Jl. Permata 1, Halim Perdanakusumah, Jakarta 13650, Indonesia (Telephone 800-9029; Fax 800-9125), or the Institute for Health Research and Development, Ministry of Health, Jl. Percetakan Negara 29, Jakarta 10560, Indonesia (Telephone/Fax 424-4226). Additional information about the DHS program may be obtained by writing to: Macro International Inc., 11785 Beltsville Drive, Calverton, Maryland 20705-3119, USA (Telephone 301-572-0200; Fax 301-572-0999).

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# CONTENTS

	Page
Tables .....	vii
Figures .....	xvii
Preface: Central Bureau of Statistics .....	xix
Preface: National Family Planning Coordinating Board .....	xxi
Preface: Ministry of Health .....	xxiii
Summary of Findings .....	xxv
Map of Indonesia .....	xxviii
 <b>CHAPTER 1 INTRODUCTION .....</b>	 <b>1</b>
1.1 Geography, History, and Economy .....	1
1.2 Population .....	2
1.3 Population and Family Planning Policies and Programs .....	4
1.4 Health Priorities and Programs .....	4
1.5 Objectives of the Survey .....	5
1.6 Organization of the Survey .....	6
 <b>CHAPTER 2 HOUSEHOLD CHARACTERISTICS AND WOMEN'S SITUATION .....</b>	 <b>9</b>
2.1 Household Population by Age and Sex .....	9
2.2 Population by Age from Other Sources .....	9
2.3 Household Composition .....	11
2.4 Level of Education of the Household Population .....	12
2.5 School Enrollment .....	15
2.6 Housing Characteristics .....	16
2.7 Household Durable Goods .....	20
2.8 Respondents' Background Characteristics .....	20
2.9 Respondents' Level of Education by Background Characteristics .....	21
2.10 Access to Mass Media .....	22
2.11 Employment .....	22
2.12 Occupation .....	23
2.13 Decisions of Use of Earnings .....	25
2.14 Child Care While Working .....	27
 <b>CHAPTER 3 FERTILITY .....</b>	 <b>35</b>
3.1 Fertility Levels and Trends .....	35
3.2 Fertility Differentials .....	38
3.3 Children Ever Born and Living .....	40
3.4 Birth Intervals .....	41
3.5 Age at First Birth .....	41
3.6 Adolescent Fertility .....	44

	Page
<b>CHAPTER 4 KNOWLEDGE AND EVER USE OF FAMILY PLANNING</b>	<b>49</b>
4.1 Knowledge of Family Planning Methods and Sources	49
4.2 Knowledge of Blue Circle	53
4.3 Knowledge of Golden Circle	55
4.4 Dissemination of Family Planning Information	56
4.5 Source of Family Planning Information	59
4.6 Discussion on Family Planning With Husband	64
4.7 Ever Use of Family Planning Methods	65
<b>CHAPTER 5 CURRENT USE OF FAMILY PLANNING</b>	<b>69</b>
5.1 Current Use of Family Planning	69
5.2 Trends in Contraceptive Use	71
5.3 Contraceptive Use Among Women Over 30 and Among Those with Three or More Children	74
5.4 Reasons for Choice of Contraceptive Method	75
5.5 Quality of Use of the Pill, Injection and Condoms	77
5.6 Problems with Current Method	77
5.7 Cost and Accessibility of Methods	78
5.8 Source of Method	80
5.9 Timing of Sterilization	83
5.10 Knowledge of the Fertile Period	85
5.11 Knowledge of the Effects of Breastfeeding on Pregnancy	87
<b>CHAPTER 6 FERTILITY PREFERENCES</b>	<b>93</b>
6.1 Desire for Additional Children	93
6.2 Ideal and Actual Number of Children	96
6.3 Need For Family Planning Services	98
6.4 Unplanned and Unwanted Fertility	103
<b>CHAPTER 7 NONUSE AND INTENTION TO USE FAMILY PLANNING</b>	<b>107</b>
7.1 Discontinuation Rates	107
7.2 Reasons for Discontinuation of Contraceptive Use	108
7.3 Intention to Use Contraception in the Future	108
7.4 Reasons for Nonuse	109
7.5 Preferred Method	111



	Page
<b>CHAPTER 8 OTHER PROXIMATE DETERMINANTS OF FERTILITY</b> .....	113
8.1 Current Marital Status .....	113
8.2 Age at First Marriage .....	115
8.3 Age at First Sexual Intercourse .....	116
8.4 Recent Sexual Activity .....	117
8.5 Postpartum Amenorrhea, Abstinence and Insusceptibility .....	120
8.6 Termination of Exposure .....	125
<b>CHAPTER 9 INFANT AND CHILD MORTALITY</b> .....	129
9.1 Background .....	129
9.2 Assessment of Data Quality .....	129
9.3 Levels and Trends in Infant and Child Mortality .....	131
9.4 Mortality Differentials .....	133
9.5 High-Risk Fertility Behavior .....	136
<b>CHAPTER 10 MATERNAL HEALTH</b> .....	139
10.1 Antenatal Care .....	139
10.2 Place of Antenatal Care, Number of Antenatal Care Visits, and Stage of Pregnancy .....	140
10.3 Tetanus Toxoid Vaccination .....	144
10.4 Iron Pills .....	145
10.5 Place of Delivery .....	147
10.6 Assistance during Delivery .....	151
10.7 Delivery Characteristics .....	154
10.8 Complications of Delivery .....	156
<b>CHAPTER 11 IMMUNIZATION OF CHILDREN</b> .....	159
11.1 Health Cards .....	159
11.2 Immunization Coverage .....	160
11.3 Immunizations by Background Characteristics .....	161
11.4 Immunizations by First Year of Life .....	164
11.5 Distribution of Vitamin A for Children .....	164
<b>CHAPTER 12 CHILDHOOD DISEASES</b> .....	169
12.1 Acute Respiratory Infection .....	169
12.2 Prevalence and Treatment of Fever .....	171
12.3 Diarrheal Disease .....	174

	Page
<b>CHAPTER 13 INFANT FEEDING</b> .....	193
13.1 Prevalence of Breastfeeding and Supplementation .....	193
13.2 Duration of Breastfeeding .....	197
<b>CHAPTER 14 KNOWLEDGE OF AIDS</b> .....	201
14.1 Source of Information about AIDS .....	201
14.2 Knowledge of Ways to Prevent AIDS .....	201
14.3 Women's Perceptions of the Risk of Getting AIDS .....	203
14.4 AIDS Prevention Behavior .....	204
14.5 Knowledge and Use of Condoms .....	205
<b>REFERENCES</b> .....	213
<b>APPENDIX A SURVEY DESIGN</b> .....	217
A.1 Sample Design and Implementation .....	217
A.2 Pretest .....	218
A.3 Field Staff Training .....	218
A.4 Fieldwork .....	221
A.5 Data Processing .....	221
<b>APPENDIX B ESTIMATES OF SAMPLING ERRORS</b> .....	225
<b>APPENDIX C QUALITY OF THE DATA: NON-SAMPLING ERRORS</b> .....	265
<b>APPENDIX D PERSONS INVOLVED IN THE 1997 INDONESIA                   DEMOGRAPHIC AND HEALTH SURVEY</b> .....	275
<b>APPENDIX E QUESTIONNAIRES</b> .....	287



## TABLES

	Page
Table 1.1	Basic demographic indicators ..... 3
Table 1.2	Results of the household and individual interviews ..... 7
Table 2.1	Household population by age, residence and sex ..... 10
Table 2.2	Population by age from other sources ..... 11
Table 2.3	Household composition ..... 12
Table 2.4.1	Educational level of the household population by background characteristics: men ..... 13
Table 2.4.2	Educational level of the household population by background characteristics: women ..... 14
Table 2.4.3	Educational level of the household population by region and province: men ..... 15
Table 2.4.4	Educational level of the household population by region and province: women ..... 16
Table 2.5	School enrollment ..... 16
Table 2.6	Housing characteristics ..... 18
Table 2.7	Household durable goods ..... 20
Table 2.8.1	Distribution of respondents: background characteristics ..... 21
Table 2.8.2	Distribution of respondents: region and province ..... 22
Table 2.9.1	Level of education: background characteristics ..... 23
Table 2.9.2	Level of education: region and province ..... 24
Table 2.10.1	Access to mass media: background characteristics ..... 25
Table 2.10.2	Access to mass media: region and province ..... 26
Table 2.11.1	Employment: background characteristics ..... 27
Table 2.11.2	Employment: region and province ..... 28
Table 2.12.1	Occupation: background characteristics ..... 29

	Page
Table 2.12.2	Occupation: region and province ..... 30
Table 2.13.2	Earnings: background characteristics ..... 31
Table 2.13.2	Earnings: region and province ..... 32
Table 2.14.1	Child care while working: background characteristics ..... 33
Table 2.14.2	Child care while working: region and province ..... 34
Table 3.1	Fertility rates from various sources ..... 36
Table 3.2	Age-specific fertility rates ..... 37
Table 3.3	Fertility by marital duration ..... 38
Table 3.4.1	Fertility: background characteristics ..... 38
Table 3.4.2	Fertility: region and province ..... 39
Table 3.5	Children ever born and living ..... 40
Table 3.6.1	Birth intervals: background characteristics ..... 42
Table 3.6.2	Birth intervals: region and province ..... 43
Table 3.7	Age at first birth ..... 44
Table 3.8.1	Median age at first birth: background characteristics ..... 44
Table 3.8.2	Median age at first birth: region and province ..... 45
Table 3.9.1	Teenage pregnancy and motherhood: background characteristics ..... 46
Table 3.9.2	Teenage pregnancy and motherhood: region and province ..... 47
Table 4.1	Knowledge of contraceptive methods and source for methods ..... 49
Table 4.2.1	Knowledge of contraceptive methods and source for methods: background characteristics ..... 51
Table 4.2.2	Knowledge of contraceptive methods and source for methods: region and province ..... 52
Table 4.3	Source of supply for contraceptive methods ..... 53
Table 4.4.1	Knowledge of Blue Circle: background characteristics ..... 54



	Page
Table 4.4.2	Knowledge of Blue Circle: region and province ..... 56
Table 4.5.1	Knowledge of Golden Circle: background characteristics ..... 57
Table 4.5.2	Knowledge of Golden Circle: region and province ..... 58
Table 4.6.1	Visits by family planning fieldworkers: background characteristics ..... 59
Table 4.6.2	Visits by family planning fieldworkers: region and province ..... 60
Table 4.7.1	Heard family planning on radio and television: background characteristics ..... 61
Table 4.7.1	Heard family planning on radio and television: region and province ..... 62
Table 4.8.1	Saw family planning message in print media: background characteristics ..... 63
Table 4.8.2	Saw family planning message in print media: region and province ..... 64
Table 4.9.1	Appropriate for family planning information: background characteristics ..... 65
Table 4.9.2	Appropriate for family planning information: region and province ..... 66
Table 4.10	Discussion of family planning with husband ..... 66
Table 4.11	Ever use of contraception ..... 67
Table 4.12	Number of children at first use of contraception ..... 68
Table 5.1	Current use of contraception ..... 69
Table 5.2.1	Current use of contraception: background characteristics ..... 70
Table 5.2.2	Current use of contraception: region and province ..... 72
Table 5.3	Trends in contraceptive use by province: Java-Bali 1976-1997 ..... 73
Table 5.4	Trends in use of specific contraceptive methods: Java-Bali, 1976-1997 ..... 74
Table 5.5	Trends in use of specific contraceptive methods: Indonesia, 1991 and 1997 ..... 75
Table 5.6	Contraceptive use status and type of method used ..... 76
Table 5.7	Reasons for using current method of contraception ..... 76
Table 5.8.1	Pill use compliance: background characteristics ..... 78
Table 5.8.2	Pill use compliance: region and province ..... 79

	Page
Table 5.9	Use of pill and condom brands ..... 80
Table 5.10	Use of injection ..... 81
Table 5.11	Problems with current method of contraception ..... 82
Table 5.12	Payment for contraceptive methods and services ..... 83
Table 5.13	Mean cost of contraceptive methods and services ..... 84
Table 5.14	Source of supply for modern contraceptive methods ..... 85
Table 5.15.1	Reason for selecting current sources of supply for contraceptive methods: background characteristics ..... 88
Table 5.15.2	Reason for selecting current sources of supply for contraceptive methods: region and province ..... 89
Table 5.16	Timing of sterilization ..... 90
Table 5.17	Knowledge of fertile period ..... 90
Table 5.18.1	Contraceptive effect of breastfeeding: background characteristics ..... 91
Table 5.18.2	Contraceptive effect of breastfeeding: region and province ..... 92
Table 6.1	Fertility preferences by number of living children ..... 94
Table 6.2	Fertility preferences by age ..... 95
Table 6.3.1	Desire to limit childbearing: background characteristics ..... 96
Table 6.3.2	Desire to limit childbearing: region and province ..... 97
Table 6.4	Ideal and actual number of children ..... 98
Table 6.5.1	Mean ideal number of children: background characteristics ..... 99
Table 6.5.2	Mean ideal number of children: region and province ..... 100
Table 6.6.1	Need for family planning services: background characteristics ..... 101
Table 6.6.2	Need for family planning services: region and province ..... 102
Table 6.7	Fertility planning status ..... 103
Table 6.8.1	Wanted fertility rates: background characteristics ..... 104



	Page
Table 6.8.2	Wanted fertility rates: region and province ..... 105
Table 7.1	Contraceptive discontinuation rates ..... 107
Table 7.2	Reasons for discontinuation ..... 109
Table 7.3	Future use of contraception ..... 110
Table 7.4	Reasons for not using contraception ..... 111
Table 7.5	Preferred method of contraception for future use ..... 111
Table 8.1.1	Current marital status by age ..... 113
Table 8.1.2	Current marital status by region and province ..... 114
Table 8.2	Age at first marriage ..... 115
Table 8.3.1	Median age at first marriage: background characteristics ..... 116
Table 8.3.2	Median age at first marriage: region and province ..... 118
Table 8.4	Age at first sexual intercourse ..... 119
Table 8.5.1	Median age at first intercourse: background characteristics ..... 120
Table 8.5.2	Median age at first intercourse: region and province ..... 121
Table 8.6.1	Recent sexual activity: background characteristics ..... 122
Table 8.6.2	Recent sexual activity: region and province ..... 123
Table 8.7	Postpartum amenorrhea, abstinence and insusceptibility ..... 124
Table 8.8.1	Median duration of postpartum amenorrhea, abstinence, and insusceptibility: background characteristics ..... 125
Table 8.8.2	Median duration of postpartum amenorrhea, abstinence, and insusceptibility: region and province ..... 126
Table 8.9	Termination of exposure to the risk of pregnancy ..... 126
Table 9.1	Infant and child mortality ..... 131
Table 9.2	Trends in infant and child mortality by region ..... 132
Table 9.3	Infant and child mortality by background characteristics ..... 134

	Page
Table 9.4	Infant and child mortality by biodemographic characteristics ..... 135
Table 9.5	Infant and child mortality by region and province ..... 136
Table 9.6	High-risk fertility behavior ..... 137
Table 10.1.1	Antenatal care: background characteristics ..... 140
Table 10.1.2	Antenatal care: region and province ..... 141
Table 10.2.1	Place of antenatal care: background characteristics ..... 142
Table 10.2.2	Place of antenatal care: region and province ..... 143
Table 10.3	Number of antenatal care visits and stage of pregnancy ..... 144
Table 10.4.1	Tetanus toxoid vaccinations: background characteristics ..... 146
Table 10.4.2	Tetanus toxoid vaccinations: region and province ..... 147
Table 10.5	Iron tablets taken during pregnancy ..... 148
Table 10.6.1	Place of delivery: background characteristics ..... 150
Table 10.6.2	Place of delivery: region and province ..... 151
Table 10.7.1	Assistance during delivery: background characteristics ..... 152
Table 10.7.2	Assistance during delivery: region and province ..... 153
Table 10.8.1	Delivery characteristics: background characteristics ..... 154
Table 10.8.2	Delivery characteristics: region and province ..... 155
Table 10.9	Complications of delivery ..... 157
Table 11.1.1	Health cards: background characteristics ..... 160
Table 11.1.2	Health cards: region and province ..... 161
Table 11.2	Vaccinations by source of information ..... 163
Table 11.3.1	Vaccinations: background characteristics ..... 165
Table 11.3.2	Vaccinations: region and province ..... 166
Table 11.4	Vaccinations in first year of life ..... 167



	Page
Table 11.5	Vitamin A doses for children ..... 168
Table 12.1.1	Prevalence and incidence of acute respiratory infection: background characteristics ..... 170
Table 12.1.2	Prevalence and incidence of acute respiratory infection: region and province ..... 172
Table 12.2.1	Prevalence and treatment of acute respiratory infection: background characteristics ..... 173
Table 12.2.2	Prevalence and treatment of acute respiratory infection: region and province ..... 174
Table 12.3.1	Prevalence and treatment of fever: background characteristics: ..... 175
Table 12.3.2	Prevalence and treatment of fever: region and province ..... 177
Table 12.4.1	Prevalence of diarrhea: background characteristics ..... 178
Table 12.4.2	Prevalence of diarrhea: region and province ..... 179
Table 12.5.1	Duration and incidence of diarrhea: background characteristics ..... 180
Table 12.5.2	Duration and incidence of diarrhea: region and province ..... 181
Table 12.6.1	Knowledge of diarrhea care: background characteristics ..... 183
Table 12.6.2	Knowledge of diarrhea care: region and province ..... 184
Table 12.7.1	Knowledge and ever use of ORS packets: background characteristics ..... 185
Table 12.7.1	Knowledge and ever use of ORS packets: region and province ..... 186
Table 12.8.1	Source of diarrhea treatment: background characteristics ..... 187
Table 12.8.2	Source of diarrhea treatment: region and province ..... 188
Table 12.9.1	Treatment of diarrhea: background characteristics ..... 189
Table 12.9.2	Treatment of diarrhea: region and province ..... 190
Table 12.10	Feeding practices during diarrhea ..... 191
Table 13.1.1	Initial breastfeeding: background characteristics ..... 193
Table 13.1.2	Initial breastfeeding: region and province ..... 194

	Page
Table 9.4	Infant and child mortality by biodemographic characteristics ..... 135
Table 9.5	Infant and child mortality by region and province ..... 136
Table 9.6	High-risk fertility behavior ..... 137
Table 10.1.1	Antenatal care: background characteristics ..... 140
Table 10.1.2	Antenatal care: region and province ..... 141
Table 10.2.1	Place of antenatal care: background characteristics ..... 142
Table 10.2.2	Place of antenatal care: region and province ..... 143
Table 10.3	Number of antenatal care visits and stage of pregnancy ..... 144
Table 10.4.1	Tetanus toxoid vaccinations: background characteristics ..... 146
Table 10.4.2	Tetanus toxoid vaccinations: region and province ..... 147
Table 10.5	Iron tablets taken during pregnancy ..... 148
Table 10.6.1	Place of delivery: background characteristics ..... 150
Table 10.6.2	Place of delivery: region and province ..... 151
Table 10.7.1	Assistance during delivery: background characteristics ..... 152
Table 10.7.2	Assistance during delivery: region and province ..... 153
Table 10.8.1	Delivery characteristics: background characteristics ..... 154
Table 10.8.2	Delivery characteristics: region and province ..... 155
Table 10.9	Complications of delivery ..... 157
Table 11.1.1	Health cards: background characteristics ..... 160
Table 11.1.2	Health cards: region and province ..... 161
Table 11.2	Vaccinations by source of information ..... 163
Table 11.3.1	Vaccinations: background characteristics ..... 165
Table 11.3.2	Vaccinations: region and province ..... 166
Table 11.4	Vaccinations in first year of life ..... 167



	Page
Table 11.5	Vitamin A doses for children ..... 168
Table 12.1.1	Prevalence and incidence of acute respiratory infection: background characteristics ..... 170
Table 12.1.2	Prevalence and incidence of acute respiratory infection: region and province ..... 172
Table 12.2.1	Prevalence and treatment of acute respiratory infection: background characteristics ..... 173
Table 12.2.2	Prevalence and treatment of acute respiratory infection: region and province ..... 174
Table 12.3.1	Prevalence and treatment of fever: background characteristics: ..... 175
Table 12.3.2	Prevalence and treatment of fever: region and province ..... 177
Table 12.4.1	Prevalence of diarrhea: background characteristics ..... 178
Table 12.4.2	Prevalence of diarrhea: region and province ..... 179
Table 12.5.1	Duration and incidence of diarrhea: background characteristics ..... 180
Table 12.5.2	Duration and incidence of diarrhea: region and province ..... 181
Table 12.6.1	Knowledge of diarrhea care: background characteristics ..... 183
Table 12.6.2	Knowledge of diarrhea care: region and province ..... 184
Table 12.7.1	Knowledge and ever use of ORS packets: background characteristics ..... 185
Table 12.7.1	Knowledge and ever use of ORS packets: region and province ..... 186
Table 12.8.1	Source of diarrhea treatment: background characteristics ..... 187
Table 12.8.2	Source of diarrhea treatment: region and province ..... 188
Table 12.9.1	Treatment of diarrhea: background characteristics ..... 189
Table 12.9.2	Treatment of diarrhea: region and province ..... 190
Table 12.10	Feeding practices during diarrhea ..... 191
Table 13.1.1	Initial breastfeeding: background characteristics ..... 193
Table 13.1.2	Initial breastfeeding: region and province ..... 194

	Page
Table 13.2	Breastfeeding status ..... 195
Table 13.3	Types of food received ..... 197
Table 13.4.1	Median duration and frequency of breastfeeding: background characteristics .... 198
Table 13.4.2	Median duration and frequency of breastfeeding: region and province ..... 200
Table 14.1.1	Knowledge of AIDS and sources of AIDS information: background characteristics ..... 202
Table 14.1.2	Knowledge of AIDS and sources of AIDS information: region and province .... 204
Table 14.2.1	Knowledge of ways to avoid AIDS: background characteristics ..... 205
Table 14.2.2	Knowledge of ways to avoid AIDS: region and province ..... 206
Table 14.3.1	Perception of the risk of getting AIDS: background characteristics ..... 207
Table 14.3.2	Perception of the risk of getting AIDS: region and province ..... 208
Table 14.4.1	AIDS prevention behavior: background characteristics ..... 209
Table 14.4.2	AIDS prevention behavior: region and province ..... 210
Table 14.5.1	Knowledge of condoms: background characteristics ..... 211
Table 14.5.2	Knowledge of condoms: region and province ..... 212
Table A.1	Sample implementation: results of the household interview ..... 219
Table A.2	Sample implementation: results of the individual interview ..... 220
Table B.1	List of selected variables for sampling errors, Indonesia 1997 ..... 228
Table B.2.1	Sampling errors - National sample, Indonesia 1997 ..... 229
Table B.2.2	Sampling errors - Urban sample, Indonesia 1997 ..... 230
Table B.2.3	Sampling errors - Rural sample, Indonesia 1997 ..... 231
Table B.2.4	Sampling errors - Java-Bali, Indonesia 1997 ..... 232
Table B.2.5	Sampling errors - Outer Java-Bali I, Indonesia 1997 ..... 233
Table B.2.6	Sampling errors - Outer Java-Bali II, Indonesia 1997 ..... 234



	Page
Table B.2.7	Sampling errors - DKI Jakarta, Indonesia 1997 ..... 235
Table B.2.8	Sampling errors - West Java, Indonesia 1997 ..... 236
Table B.2.9	Sampling errors - Central Java, Indonesia 1997 ..... 237
Table B.2.10	Sampling errors - DI Yogyakarta, Indonesia 1997 ..... 238
Table B.2.11	Sampling errors - East Java, Indonesia 1997 ..... 239
Table B.2.12	Sampling errors - Bali, Indonesia 1997 ..... 240
Table B.2.13	Sampling errors - Dista Aceh, Indonesia 1997 ..... 241
Table B.2.14	Sampling errors - North Sumatra, Indonesia 1997 ..... 242
Table B.2.15	Sampling errors - West Sumatra, Indonesia 1997 ..... 243
Table B.2.16	Sampling errors - South Sumatra, Indonesia 1997 ..... 244
Table B.2.17	Sampling errors - Lampung, Indonesia 1997 ..... 245
Table B.2.18	Sampling errors - West Nusa Tenggara, Indonesia 1997 ..... 246
Table B.2.19	Sampling errors - West Kalimantan, Indonesia 1997 ..... 247
Table B.2.20	Sampling errors - South Kalimantan, Indonesia 1997 ..... 248
Table B.2.21	Sampling errors - North Sulawesi, Indonesia 1997 ..... 249
Table B.2.22	Sampling errors - South Sulawesi, Indonesia 1997 ..... 250
Table B.2.23	Sampling errors - Riau, Indonesia 1997 ..... 251
Table B.2.24	Sampling errors - Jambi, Indonesia 1997 ..... 252
Table B.2.25	Sampling errors - Bengkulu, Indonesia 1997 ..... 253
Table B.2.26	Sampling errors - East Nusa Tenggara, Indonesia 1997 ..... 254
Table B.2.27	Sampling errors - East Timor, Indonesia 1997 ..... 255
Table B.2.28	Sampling errors - Central Kalimantan, Indonesia 1997 ..... 256
Table B.2.29	Sampling errors - East Kalimantan, Indonesia 1997 ..... 257
Table B.2.30	Sampling errors - Central Sulawesi, Indonesia 1997 ..... 258

	Page
Table B.2.31	Sampling errors - Southeast Sulawesi, Indonesia 1997 ..... 259
Table B.2.32	Sampling errors - Maluku, Indonesia 1997 ..... 260
Table B.2.33	Sampling errors - Irian Jaya, Indonesia 1997 ..... 261
Table C.1	Household age distribution ..... 265
Table C.2	Age distribution of eligible and interviewed women ..... 266
Table C.3	Completeness of reporting ..... 267
Table C.4	Births by calendar years ..... 268
Table C.5	Reporting of age at death in days ..... 270
Table C.6	Reporting of age at death in months ..... 271



## FIGURES

	Page
Figure 2.1	Number of Persons Reported at Each Age by Sex ..... 10
Figure 2.2	Population Pyramid of Indonesia ..... 11
Figure 2.3	Percentage of the Population Age 5-15 Enrolled in School by Age Group and Sex ..... 17
Figure 2.4	Housing Characteristics by Residence ..... 19
Figure 3.1	Age-Specific Fertility Rates, Indonesia 1967-1997 ..... 36
Figure 4.1	Percentage of Currently Married Women Who Know Specific Modern Contraceptive Methods, Indonesia, 1991-1997 ..... 50
Figure 5.1	Percentage of Currently Married Women Age 15-49 Who Are Using a Contraceptive Method ..... 71
Figure 5.2	Percentage of Currently Married Women Age 15-49 Using Contraception by Province, Java-Bali 1976-1997 ..... 73
Figure 5.3	Percentage of Currently Married Women Age 15-49 Using Specific Modern Contraceptive Methods, Java-Bali, 1976-1997 ..... 74
Figure 5.4	Percentage of Currently Married Women Age 15-49 Using Specific Contraceptive Methods, Indonesia, 1994 and 1997 ..... 75
Figure 5.5	Distribution of Current Users of Modern Contraceptive Methods by Source of Supply, Indonesia, 1994 and 1997 ..... 86
Figure 5.6	Distribution of Current Users of Modern Contraceptive Methods by Source of Supply ..... 86
Figure 5.7	Distribution of Current Users of Modern Contraceptive Methods by Reason for Using Most Recent Source of Supply ..... 87
Figure 6.1	Fertility Preferences of Currently Married Women 15-49 ..... 94
Figure 7.1	Reasons for Discontinuation of Contraceptive Methods ..... 110
Figure 8.1	Median Age at First Marriage by Region, Indonesia, 1991, 1994, and 1997 ..... 117
Figure 8.2	Median Age at First Marriage by Province, Java-Bali, 1991, 1994, and 1997 ..... 119
Figure 8.3	Percentage of Births in the last Three Years for Which Mothers Are Amenorrheic or Abstaining ..... 127

	Page
Figure 9.1	Number of Reported Deaths among Children Under Two Years by Age at Death in Months ..... 130
Figure 9.2	Infant Mortality Rates, Selected Sources, Indonesia 1971-1997 ..... 132
Figure 10.1	Number of Antenatal Care Visits and Gestation Period at First Visit for Births in the Five Years Preceding the Survey ..... 145
Figure 10.2	Delivery Characteristics of Births in the Five Years Preceding the Survey ..... 149
Figure 11.1	Health Card Coverage by Child's Age, Region and Mother's Education ..... 162
Figure 11.2	Immunization Coverage Among Children Age 12-23 Months ..... 164
Figure 12.1	Prevalence of Cough and Rapid Breathing ..... 171
Figure 12.2	Treatment of Childhood Diseases ..... 176
Figure 12.3	Feeding Practices Among Children Under Five with Diarrhea ..... 191
Figure 13.1	Distribution of Children by Breastfeeding (BF) Status, According to Age ..... 196
Figure 13.2	Median Duration of Any Breastfeeding ..... 199
Figure 14.1	Knowledge of AIDS Among Ever-Married Women ..... 203
Figure C.1	Calendar Birth Ratios for Living, Dead, and All Children ..... 269



## PREFACE

The 1997 Indonesia Demographic and Health Survey (IDHS) is the fourth survey on demography and health in Indonesia and was conducted as part of the worldwide Demographic and Health Surveys (DHS) project. The first survey was the 1987 National Indonesia Contraceptive Prevalence Survey (NICPS), the second and third surveys were the 1991 IDHS and 1994 IDHS. The 1997 IDHS was designed as a collaborative effort of four institutions, i.e., the Central Bureau of Statistics (CBS), the State Ministry of Population/National Family Planning Coordinating Board (NFPCB), the Ministry of Health, and Macro International Inc. The Government of Indonesia/NFPCB provided all of the local costs through the Demographic and Health Surveys (DHS) program, a USAID-funded project carried out in many developing countries. The CBS was responsible for conducting the survey, including survey design, fieldwork, and data processing.

The 1997 IDHS fieldwork was carried out from September to December 1997 in selected enumeration areas in all of the 27 provinces in Indonesia. The sample is a replication of the 1994 IDHS sample, which is a subsample of the 1994 National Socio-Economic Survey, and was designed to produce reliable estimates of major variables for each province and for urban and rural areas of the three family planning program development areas (Java-Bali, Outer Java-Bali I, and Outer Java-Bali II).

The main objective of the 1997 IDHS is to provide policymakers and program managers in population and health with detailed information on fertility and family planning; infant, child and maternal mortality, and maternal and child health. The content of the 1997 IDHS was expanded from prior surveys to include a module on family welfare which will not be covered in this report. The survey no longer investigated the availability of family planning and health services as in the 1994 IDHS.

This report supplements the preliminary report released earlier. The success of this very important undertaking would not have been realized without the relentless effort and dedication of all parties concerned. To those who actively contributed to this project, I would like to extend my gratitude and appreciation, especially to USAID and the DHS program of Macro International Inc.

Central Bureau of Statistics

Jakarta, Indonesia  
September 1998

Sugito, MA  
Director General





## PREFACE

The Indonesia Demographic and Health Survey (IDHS), which is part of the Demographic and Health Surveys (DHS) Project, is one of prominent national surveys in the field of population, family planning, and health. The survey is not only important nationally for planning and evaluating population, family planning, and health developments, but is also important internationally since IDHS has been designed so uniquely that it can be compared with similar surveys in other developing countries.

The 1997 IDHS is the most recent of four similar surveys done in Indonesia. The first survey was conducted a decade ago (1987), the second in 1991, and the third in 1994. As is true for the past surveys, the 1997 IDHS, which covers around 29,000 respondents of ever-married women age 15-49, is meant to collect such important data and information as fertility levels, family planning, maternal and child health services, availability and accessibility of family planning and health services, as well as information on knowledge and attitude toward HIV/AIDS. These data and information are very beneficial and needed by various government institutions such as the Department of Health, the State Ministry of Population/NFPCB, as well as other government and private institutions that are associated with or are interested in population, family planning, and health issues.

The Indonesia Demographic and Health Surveys have long been known to have good "reputation" since they collect so much population, family planning, and health information of excellent quality. Given their variability and representativeness, the data should be and need to be used optimally. In addition to the benefits gained by the government/decision makers in developing policies and programs in the field of population, family planning, and health, this large data set that contains rich information should also be used by professionals and academicians in their effort to study social theories or phenomena. These efforts should be made much easier due to the current rapid development of advanced techniques in quantitative analysis and the advanced technology of personal computer.

Finally, I would like to express my deepest gratitude to the Central Board of Statistics (CBS), Macro International Inc in Maryland (USA), USAID, the 1997 IDHS Steering and Technical Committees, and the Office of Training and Development Programs of NFPCB for their contribution in conducting the 1997 IDHS. The high quality of the 1997 IDHS final report is indicative of the professional manner in which this project was designed and implemented.

State Minister of Population/  
Chairman, National Family Planning  
Coordinating Board,

Prof. dr. Ida Bagus Oka





## PREFACE

Health Law No. 23/1992, which provides a legal basis for health sector activities, stipulates that the goal of health development is to increase the awareness, willingness, and ability of everyone to live a healthy life. The strategy adopted to improve the health and nutritional status of the population, following the National Guidelines on State Policy 1993, is two pronged: to improve the quality of health services, which must become affordable to all layers of the population; and to promote a healthy lifestyle supported by adequate housing and environmental sanitation. The Indonesian Ministry of Health's priorities are to improve the quality distribution of health services, with particular attention to the poor. Strengthening the preventive and promotive activities aimed at reducing maternal, infant, and child mortality and morbidity, reducing fertility, and improving nutritional status and improve the quality of health services and associated referral systems are among the major objectives of the Sixth Five-Year Development Plan (REPELITA VI, 1994-1998).

The 1997 Indonesia Demographic and Health Survey (IDHS) is a nationally representative 'community-based' survey which provides detailed information on levels and trends in fertility, mortality, and family planning; maternal and child health services and maternal mortality and knowledge of AIDS. This information together with other information from different community-based surveys and facility-based statistics are very useful in assessing the achievements and quality of interventions by the Ministry of Health.

The IDHS surveys was conducted in late 1997 covering a period in which the country is caught in number of problems including unfavorable climatic condition, due to long dry season and forest fires followed by extensive rain fall and floods, depreciation of the currency, and a wide spread political discontent. However, the survey findings show the rapid improvement of health status as a result of increased knowledge about health care and better access of health services. The findings proved that health policies and programs adopted by the Ministry of Health have been successful in improving the health condition of the public. The results of the 1997 IDHS should be disseminated to decision makers at different administrative levels and to the community at large.

In conclusion, I would like to extend my gratitude and appreciation to the Central Bureau of Statistics, the National Family Planning Coordination Board, USAID, Macro International Inc. in Maryland (USA) and all other parties who have contributed to the success of the 1997 IDHS. I believe the survey results are useful in developing future health programs.

Minister of Health  
Republic of Indonesia

Prof. Dr. F.A. Moeloek



## SUMMARY OF FINDINGS

The 1997 Indonesia Demographic and Health Survey (IDHS) is a nationally representative survey conducted between September and December 1997. The survey is the fourth in a series of Demographic and Health Surveys carried out in Indonesia. The first three surveys were conducted in 1987, 1991 and 1994. As in previous surveys, the main purpose of the survey was to provide policy makers and program managers in population and health with detailed information on fertility, infant and child mortality, family planning, and maternal and child health. As in the 1994 IDHS, the 1997 survey also collected household expenditure data, information necessary for the calculation of the maternal mortality rate, and data concerning knowledge of AIDS. In addition, the 1997 IDHS collected information which can be used as indicators of family welfare. Findings on the household expenditures, maternal mortality and family welfare are not presented in this report.

All of the IDHS surveys were carried out by the Central Bureau of Statistics at the request of the State Ministry for Population/National Family Planning Coordinating Board (NFPCB). Since 1991, the Ministry of Health collaborated at all stages of the project. The DHS project of Macro International Inc. provided technical assistance under a contract with the United States Agency for International Development (USAID). All of the local costs for the survey were provided by the Government of Indonesia through the NFPCB development budget.

A total of 34,255 households and 28,810 ever-married women age 15-49 were interviewed. Findings of the survey are presented at the national level, by the three regions developed for family planning program management classified by urban and rural residence, and for each of the 27 provinces in the country. The results indicate that the majority of women (87 percent) have had some formal education, and 59 percent completed primary or higher education. Half of the respondents worked in the 12 months prior the survey.

Over the last three decades, fertility in Indonesia has declined from 5.6 children per woman in 1967-1970 to 2.8 children per woman in 1995-1997. The decline in fertility varied over time, and across region. It accelerated between the late 1960s and mid-1980, and then slowed. Women in Java-Bali have the lowest total fertility rate (2.6 children per woman), while women in Outer Java-Bali I and Outer Java-Bali II have 3.1 and 3.2 children per woman, respectively. In some provinces, namely DKI Jakarta, DI Yogyakarta and Bali, fertility has reached or is approaching the replacement level. In others, the total fertility rates is still 3 children or more. Since the early 1990s, the peak of the age-specific fertility curve has shifted from women age 20-24 to women age 25-29.

One of the factors influencing fertility decline is the gradual increase in the proportion of women who stay single. Those who marry, do so at a later age. The median age at first marriage has increased from 17.3 years for women age 45-49 to 19.9 among women age 25-29. Consequently, women also start childbearing at a later age. The median age at first birth increased moderately over the last two decades from 20.5 years among women age 40-44 to 21.6 years for women age 25-29. Women in Java-Bali marry at least one year earlier than women in the Outer Java-Bali regions. Women with secondary or higher education marry four years later than women with some secondary education, and five years later than women who have no formal education.

Women's knowledge of family planning methods and sources for methods is virtually universal. While familiarity with pills and IUD remained at high levels (94 and 85 percent of currently married women, respectively), the proportion of women who have heard of injections and implants has increased substantially to 94 and 81 percent, respectively.



Fifty-seven percent of currently married women use a method of family planning and almost all of these women use a modern contraceptive method. The majority of contraceptive users use injection (21 percent of all currently married women age 15-49, or 37 percent of all current users). The next most commonly used methods are the pill (15 percent) and IUD (8 percent). As expected, women in the Java-Bali region show the highest contraceptive use (61 percent), while the lowest use is in Outer Java-Bali II (51 percent).

Private medical sources are gaining popularity in supplying modern contraceptives, and are almost drawing equal to government sources (42 percent and 43 percent, respectively). The remaining 15 percent of users obtain their methods from other sources such as village delivery posts (*polindes*), integrated health posts (*posyandu*) and family planning posts. The most often used service providers among the government sources are public health centers and among private medical sources are midwives.

The level of sustainability of the family planning program in terms of the proportion of users who pay for services is higher in 1997 than that in 1994--84 percent compared with 74 percent, respectively. In 1997, three in four contraceptive users who obtained a family planning method from a government source paid for the method.

One measure of quality of contraceptive use is the rate at which users discontinue using a method, and their reasons for doing so. Overall, 24 percent of family planning users discontinue using a method within 12 months of starting use. Of importance to family planning program managers is the fact that fear of side effects and health concerns account for 10 percent of discontinuations.

While contraceptive use continues to increase, unmet need for family planning services still accounts for 9 percent of currently married women. The unmet need is equally split between the need for spacing (4 percent) and limiting (5 percent). If the total demand for family planning were satisfied, the contraceptive prevalence rate would increase to 67 percent.

Fertility desires have not changed much in the past ten years. Half of married women do not want any more children or have been sterilized. Younger women are more likely to want to have another child, while older women tend to want to stop childbearing. If all unwanted births were avoided, the total fertility rate would be 2.4 children per woman instead of the observed 2.8 children.

Childhood mortality continues to decline. The infant mortality rate for the period approximately 1992-1997 is 46 deaths per 1,000 live births, down from 59 deaths in the period 1987-1992. The comparable decline in under-five mortality is from 83 to 58 deaths per 1,000 live births. The probability of dying in infancy is highest among births to women with no education, in rural areas, births who received no antenatal or delivery care, and those born less than two years after a preceding birth.

Nine in ten births in the five years preceding the survey received care from a medical professional during pregnancy. The most common providers of antenatal care are public health centers (39 percent) and private midwives (27 percent). More than half of pregnant women received two or more tetanus toxoid injections and three-quarters received iron tablets to reduce pregnancy-induced anemia.

Although the majority of births in Indonesia are still delivered by a traditional birth attendant (54 percent), the role of private midwives in assisting delivery has become more prominent. In 1997, midwives provided assistance to four in ten births in the five-year period before the survey.

IDHS data also indicate some improvement in vaccination coverage for children. Based on

information recorded on the health card and reported by the mothers, 55 percent of children 12-23 months have received BCG, measles, and three doses of diphtheria, pertussis, tetanus and polio vaccines. This level is higher than that recorded in the 1994 IDHS (50 percent). Low birth order children, those living in urban areas, particularly in the Outer Java-Bali II region, and children of better educated mothers are more likely to have received the complete immunization schedule.

In the two-week period preceding the survey, 9 percent of children under five were reported to have had a cough accompanied by rapid breathing, symptoms of acute respiratory illness. Seven in 10 of these children were taken to a health facility for treatment or advice.

Over the same time period, 10 percent of children under five suffered from diarrhea, of whom 54 percent were taken to a health facility for treatment. Oral rehydration salts were given to 48 percent of children with diarrhea. While 57 percent of children who had diarrhea were given more fluids, the majority (76 percent) were given the same amount or less solid foods, and 80 percent of breastfed children were given the same amount or less breast milk.

One in four children under five was reported to have had a fever at some point during the two weeks before the survey. More than half of children (56 percent) of children with fever were taken to a health facility for treatment.

While the Ministry of Health recommends that infants under 4 months be given breast milk only, supplementary feeding is initiated very early. Among infants under 4 months old, in addition to breast milk, 3 percent were given plain water, 5 percent were given other liquid, 8 percent were given other milk, and 28 percent have started taking solid or mushy food. On average, children are breastfed for almost two years (24 months). Rural children, those living in Java-Bali, children whose mothers have no education and those who were assisted by a traditional birth attendant during delivery tend to be breastfed longer than other children.

More than half of ever-married women in Indonesia have heard about AIDS. Television is overwhelmingly the most important source of information about the disease. Knowledge of AIDS varies across subgroups of women. Urban women, better educated women and young women in their 20s are more likely than other women to have heard about AIDS. Most women (86 percent) who know about AIDS also know about condoms.



# INDONESIA



## PROVINCES

- |                  |                        |                        |
|------------------|------------------------|------------------------|
| 1. Dista Aceh    | 10. West Java          | 19. South Kalimantan   |
| 2. North Sumatra | 11. Central Java       | 20. East Kalimantan    |
| 3. West Sumatra  | 12. DI Yogyakarta      | 21. North Sulawesi     |
| 4. Riau          | 13. East Java          | 22. Central Sulawesi   |
| 5. Jambi         | 14. Bali               | 23. South Sulawesi     |
| 6. South Sumatra | 15. West Nusa Tenggara | 24. Southeast Sulawesi |
| 7. Bengkulu      | 16. East Nusa Tenggara | 25. Maluku             |
| 8. Lampung       | 17. West Kalimantan    | 26. Irian Jaya         |
| 9. DKI Jakarta   | 18. Central Kalimantan | 27. East Timor         |



# CHAPTER 1

## INTRODUCTION

### 1.1 Geography, History, and Economy

The Republic of Indonesia, which consists of approximately 17,000 islands, is located between 6 degrees north and 11 degrees south latitude, and from 95 to 141 degrees east longitude. The Indonesian archipelago lies between Asia and Australia. It is bounded by the South China Sea in the north, the Pacific Ocean in the north and east, and the Indian Ocean in the south and west. There are five major islands: Sumatra in the west; Java in the south; Kalimantan straddling the equator; Sulawesi, which resembles the letter "K"; and Irian Jaya bordering Papua New Guinea on the west. Two remaining groups of islands are Maluku and Nusa Tenggara, running from Sulawesi to Irian Jaya in the north, and from Bali to Timor in the south. Other islands are small and mostly uninhabited. More than 80 percent of Indonesia's territory is covered with water; the land area is about 1.9 million square kilometers. The large number of islands and their dispersion over a wide area has given rise to a diverse culture and hundreds of ethnic groups, each with its own language. This is the basis of the national motto, "Unity in Diversity."

Indonesia's climate is tropical with two seasons. The dry season extends from May to October, and the rainy season from November to April.

Indonesia is administratively divided into 27 provinces. Each province consists of *regencies* and *municipalities*. Altogether, there are 249 regencies and 65 municipalities. The next lower administrative unit is the *subdistrict*, then the *village*. Classification of urban and rural areas is made at the village level. In 1997, there were 4,028 subdistricts and 66,913 villages (7,230 urban villages and 59,683 rural villages).

Since proclaiming its independence in 1945, Indonesia has experienced several political shifts. In 1948, a rebellion by the Communist Party took place in Madiun. Up until the end of 1949, when the Dutch gave up control over Indonesia, there were disputes against the ruling democratic republic. Some factions, supported by the Dutch, formed the Federation of Indonesian Republics, which lasted less than one year. From 1950 to 1959, Indonesia faced several political problems, including the adoption of a multi-party system (which resulted in political and economic instability) and rebellions caused by ideological, ethnic and racial differences. The history of the Republic of Indonesia had a turning point after an aborted coup by the Communist Party in September 1965. In 1966, President Suharto began a new era with the establishment of the New Order Government, which was oriented toward overall development.

After more than 30 years under the New Order Government, Indonesia has made substantial progress, particularly in stabilizing political and economic conditions. A period of great economic growth was experienced from 1968 to 1986, when per capita income increased sharply from about US \$50 to US \$385. This increase was primarily the result of the international oil boom in the early 1980s, from which more than 60 percent of the country's foreign exchange came. The drop in the price of crude oil and natural gas in 1985 forced the Government to look for alternative sources of income, such as manufacturing, international trade, and service industries. This effort has been successful. Per capita income has increased to around US \$1,124 in 1996, while the economic growth was around 5 percent. All of this increase ended in mid-1997 when the Asian economy collapsed. The value of the currency plummeted, prices increased, and unemployment rose dramatically. In addition, parts of the country suffered from relatively long droughts and extensive forest fires.

An important achievement of the Indonesian government is the improvement of the general welfare of the population by ensuring the availability of adequate food, clothing, and housing, as well as providing adequate education and health services. Data from the 1971 and 1990 Population Censuses and the 1997 National Socio-Economic Survey (Susenas) show that in the past 25 years Indonesia has undergone a major improvement in the area of education. The percentage of persons age 10 years and over who were literate increased from 61 percent in 1971 to 84 percent in 1990 and to 89 percent in 1997. The improvement in education is most visible among females. Whereas school attendance among children age 7 to 12 years in 1971 was 62 percent for males and 58 percent for females, the corresponding rate for both in 1997 was 95 percent. During the same period, the percentage of persons who never attended school decreased as the percentage of graduates at all levels increased. The percentage of persons who finished primary school only increased from 20 percent in 1971 to 30 percent in 1990 and to 33 percent in 1997, while persons who attended junior high school or had higher education increased from 7 percent in 1971 to 22 percent in 1990, and to 30 percent in 1997. At all levels, the increase in education among females has been greater than that of males.

One possible effect of more girls staying in school longer is the rise in the average age at first marriage. The mean age at first marriage increased from 19.6 years in 1971 to 21.4 years in 1990; the increase was greater in urban areas than in rural areas. The increasing level of education has also provided women with greater opportunity for participation in the labor force. Labor force participation among women age 10 and over increased from 33 percent in 1971 to 41 percent in 1997. Most women work in agriculture, trade, or the service industries.

## 1.2 Population

According to the 1990 Population Census, the population of Indonesia was 179.4 million in 1990 and was projected to increase to 201.4 million in 1997. This would make Indonesia the fourth most populous country in the world after the People's Republic of China, India, and the United States. An estimated 55.4 million persons (31 percent of the population) were living in urban areas in 1990, compared with 73.4 million (36 percent of the population) living there in 1997.

In addition to an already large population, Indonesia has a high rate of population growth. However, this rate has declined in the last two decades. Between 1971 and 1980, the average annual rate of population growth was 2.3 percent, compared with 2.0 percent between 1980 and 1990 (see Table 1.1). The population growth rate is projected to have declined further to 1.7 percent between 1990 and 1997.

Another characteristic of Indonesia is the uneven distribution of the population among the islands and provinces. The 1990 Population Census indicates that the population density varies across regions, not only among islands, but also among provinces of the same island. Java, which covers only 7 percent of the total area of Indonesia, is inhabited by 60 percent of the country's population, making the population density of Java (814 persons per square kilometer) higher than that of other islands. By comparison, Kalimantan has a density of 17 persons per square kilometer. Comparison of provinces in Java shows that population density ranges from 12,500 persons per square kilometer in DKI Jakarta to 678 persons per square kilometer in East Java. Population density at the national level was 93 persons per square kilometer in 1990 and projected to be 104 persons per square kilometer in 1997.

Past census and survey data show that Indonesia's fertility has declined significantly since the 1960s. The crude birth rate (CBR), which was estimated at 41 births per 1,000 population in the late 1960s, declined to 36 per 1,000 in the period 1976-79, resulting in an annual percentage decline of 1.3 percent. The CBR declined further to 28 births per 1,000 population in the period 1986-89, with an average annual rate of decline of 2.1 percent between the periods 1976-79 and 1986-89. These figures suggest a more rapid decline in fertility in the more recent years. The 1997 CBR was projected to be 23 births per 1,000 population.



Table 1.1 also shows that the total fertility rate (TFR) declined from 5.6 children per woman in the period 1967-70, to 4.7 children in 1976-79, and to 3.3 children in 1986-89. The average annual decline between the periods 1967-70 and 1976-79 was 1.8 percent; between the periods 1976-79 and 1986-89 it was 2.9 percent. The TFR is projected to be 2.6 children per woman in 1997.

**Table 1.1 Basic demographic indicators**

Demographic indicators from selected sources, Indonesia 1971-1997

Index	1971 Census	1980 Census	1985 Intercensal Survey	1990 Census	1997 Projection <sup>1</sup>
Population (millions)	119.2	147.5	164.6	179.4	201.4
Growth rate (GR) <sup>2</sup> (percent)	2.10	2.32	2.22	1.98	1.67
Density (pop/km <sup>2</sup> )	62.4	77.0	85.0	93.0	103.5
Percent urban	17.3	22.3	26.2	30.9	36.0
Reference period	1967-70	1976-79	1981-84	1986-89	1997
Crude birth rate (CBR) <sup>3</sup>	40.6	35.5	32.0	27.9	22.7
Crude death rate (CDR) <sup>4</sup>	19.1	13.1	11.4	8.9	7.7
Total fertility rate (TFR) <sup>5</sup>	5.6	4.7	4.1	3.3	2.6
Infant mortality rate <sup>6</sup> (per 1,000 births)	142	112	71	70	50
Life expectancy <sup>6</sup>					
Male	45.0	50.9	57.9	57.9	62.8
Female	48.0	54.0	61.5	61.5	66.7

<sup>1</sup> Projected based on the 1990 Population Census and the 1995 Intercensal Population Survey

<sup>2</sup> Calculated using compound interest formula

<sup>3</sup> Births per 1,000 population; estimated using the formula  $CBR = 9.48968 + 5.55 TFR$

<sup>4</sup> Deaths per 1,000 population;  $CDR = CBR - GR$

<sup>5</sup> Estimated based on own children method

<sup>6</sup> Estimated using indirect estimation techniques

Source: Central Bureau of Statistics, 1987; 1992; 1997a, 1997b; 1998; Central Bureau of Statistics et al., 1989

The same data sources also demonstrate that there has been a significant decline in the level of mortality. An important achievement of the first long-term development plan (LTDP) spanning the period between 1969-70 and 1993-94 was the reduction of infant and child mortality, which was achieved through integrated health and family planning services. The infant mortality rate (IMR) declined from 142 deaths per 1,000 live births in 1971, to 112 per 1,000 in 1980, to 70 per 1,000 in 1990, showing an average annual rate of decline of 2.7 percent. The IMR is projected to reach 50 deaths per 1,000 live births in 1997. During the same period, the crude death rate (CDR) decreased from 19 deaths per 1,000 population in 1971 to 9 per 1,000 in 1990, resulting in an average annual rate of decline of 2.8 percent. The CDR is projected to be 8 deaths per 1,000 population in 1997.



### **1.3 Population and Family Planning Policies and Programs**

The Government of Indonesia has devoted many of its development programs to population-related issues since President Suharto joined other heads of state in signing the Declaration of the World Leaders in 1967. In this declaration, rapid population growth was considered an obstacle to economic development. In order to carry out its population policy, the government has launched several programs, of which family planning is an important part.

Family planning activities were initiated in Indonesia in 1957 by a private organization called the Indonesian Planned Parenthood Association (IPPA), which works under the auspices of the International Planned Parenthood Federation (IPPF). IPPA provided family planning advice and services, as well as maternal and child care. In 1968, the government established a National Family Planning Institute, which was reorganized as the National Family Planning Coordinating Board (NFPCB) two years later. NFPCB is a non-departmental body, and the chairman reports directly to the President. The government of Indonesia has a strong commitment to family planning and has been working with religious and community leaders to develop programs to promote family planning.

Family planning programs were not initiated simultaneously throughout the country. In the first 5-year development plan (Repelita), which covered the period 1969-70 to 1973-74, programs began in the six provinces of Java and Bali. In the next five-year plan, the program was expanded to ten provinces outside Java-Bali, i.e. Dista Aceh, North Sumatra, West Sumatra, South Sumatra, Lampung, West Nusa Tenggara, West Kalimantan, South Kalimantan, North Sulawesi, and South Sulawesi. In the third Repelita, the programs were further expanded to include the remaining eleven provinces. The ten provinces that started family planning programs in Repelita II are called the Outer Java-Bali I Region, whereas those that started the programs in Repelita III are grouped as the Outer Java-Bali II Region.

In less than three decades, the population policy has not only contributed to reducing the fertility rate of the country by half, but is also helping to improve family welfare. One of several factors that contributes to the success of the family planning program in Indonesia has been the involvement of the community in running the programs on the notion that family planning is more than simply controlling births. In the Act No.10 passed in 1992, family planning is explicitly defined as the efforts to increase the society's concern and participation through delaying marriage, controlling births, fostering family resilience, and improving family welfare to create small, happy, and prosperous families.

Additionally, during Repelita VII, the national family planning movement will be maintained and improved. As stated in the 1998 Broad State Policy (GBHN), "The national family planning movement as one of main activities to achieve family welfare will continue to be aimed at controlling population growth through limiting births in order to achieve harmony and balance between the growth of the population and the economy to achieve more self-reliant, happy, and prosperous families." Furthermore, the 1998 GBHN stated that family planning self-reliance and institutionalization should be improved through better accessibility and quality of both contraceptive information and supply.

### **1.4 Health Priorities and Programs**

Health Law No. 23/1992 provides a legal basis for health sector activities. It stipulates that the goal of health development is to increase the awareness, willingness, and ability of everyone to live a healthy life. The law emphasizes the decentralization of operational responsibility and authority to the local level as a prerequisite for successful and sustainable development.

In the Second 25-Year Development Plan (1994-2019), economic and human development are identified as the keys to national development and self-reliance. Following the National Guidelines on State Policy issued in 1993, the strategy adopted to improve the health and nutritional status of the population is two-pronged: to improve the quality of health services that must become affordable to all and to promote a healthy lifestyle supported by adequate housing and environmental sanitation.

The Indonesia Ministry of Health's priorities are to improve the quality and equity of services, with particular attention to the poor. In the health sector, the major objectives of the Sixth Five-Year Development Plan (Repelita VI, 1994-1998) are to:

- Strengthen preventive and promotive activities aimed at reducing maternal, infant, and child mortality and morbidity; reducing fertility; and improving nutritional status
- Improve the quality of health services and associated referral systems
- Increase the efficiency and effectiveness of services and promote improved management of health resources
- Transform public hospitals into self-supporting units through improved cost recovery
- Promote the use of high-quality generic drugs
- Provide a health card for the poorest families, entitling them to free health services
- Promote and facilitate joint public and private financing of health care services
- Encourage the private sector to finance preventive and promotive health care
- Decentralize health service management to the district level.

The government puts great emphasis on intersectoral coordination of efforts, joint responsibility of local government and the community, region-specific programs, targeting of vulnerable groups, and support of a strong information and communication program.

## **1.5 Objectives of the Survey**

The 1997 Indonesia Demographic and Health Survey (IDHS) is a follow-on project to the 1987 National Indonesia Contraceptive Prevalence Survey (NICPS), the 1991 IDHS, and the 1994 IDHS. The 1997 IDHS was expanded from the 1994 survey to include a module on family welfare; however, unlike the 1994 survey, the 1997 survey no longer investigated the availability of family planning and health services. The 1997 IDHS also included as part of the household schedule a household expenditure module that provided a means of identifying the household's economic status. The findings on family welfare, household expenditures, as well as maternal mortality, are discussed in separate reports.

The 1997 IDHS was specifically designed to meet the following objectives:

- Provide data concerning fertility, family planning, maternal and child health, maternal mortality, and awareness of AIDS that can be used by program managers, policymakers, and researchers to evaluate and improve existing programs



- Provide data about availability of family planning and health services, thereby offering an opportunity for linking women's fertility, family planning, and child care behavior with the availability of services
- Provide household expenditure data that which can be used to identify the household's economic status
- Provide data that can be used to analyze trends over time by examining many of the same fertility, mortality, and health issues that were addressed in the earlier surveys (1987 NICPS, 1991 IDHS and 1994 IDHS)
- Measure changes in fertility and contraceptive prevalence rates and at the same time study factors that affect the changes, such as marriage patterns, urban/rural residence, education, breastfeeding habits, and the availability of contraception
- Measure the development and achievements of programs related to health policy, particularly those concerning the maternal and child health development program implemented through public health clinics in Indonesia
- Provide indicators for classifying families according to their welfare status.

## 1.6 Organization of the Survey

The 1997 IDHS was implemented by the Central Bureau of Statistics (CBS) at the request of the State Ministry of Population/National Family Planning Coordinating Board (NFPCB). These organizations and the Ministry of Health (MOH) collaborated in the development of the questionnaire and in the analysis and dissemination of the results. The Government of Indonesia provided all of the local costs through the NFPCB development budget. Macro International Inc. furnished technical assistance through the Demographic and Health Surveys Program (DHS), a project funded by the U.S. Agency for International Development (USAID).

A survey Steering Committee was established; it consisted of senior representatives from the State Ministry of Population/NFPCB, CBS, MOH, the National Development Planning Board (Bappenas), and the Demographic Institute at the University of Indonesia. The Technical Team, consisting of members of the same organizations, met more frequently than the Steering Committee to discuss and decide on technical issues relating to the implementation of the survey.

The CBS executed the survey and processed the data. The directors of the provincial statistical offices were responsible for both the technical and the administrative aspects of the survey in their area. They were assisted by field coordinators, most of whom were chiefs of the population statistics sections in the provincial offices.

The 1997 IDHS used three questionnaires: the household questionnaire, the questionnaire on family welfare, and the individual questionnaire for ever-married women 15-49 years old. The general household and individual questionnaires were based on the DHS Model "A" Questionnaire, which is designed for use in countries with high contraceptive prevalence. Additions and modifications to the model questionnaire were made in order to provide detailed information specific to Indonesia. The questionnaires were developed mainly in English and were translated into Indonesian. One deviation from the standard DHS practice is the exclusion of the anthropometric measurement of young children and their mothers. A separate survey carried out by MOH provides this information.



The household questionnaire includes an expenditure schedule adapted from the core Susenas questionnaire model. Susenas is a national household survey carried out annually by CBS to collect data on various demographic and socioeconomic indicators of the population. The family welfare questionnaire was aimed at collecting indicators developed by the NFPCB to classify families according to their welfare status. Families were identified from the list of household members in the household questionnaire. The expenditure module and the family welfare questionnaire were developed in Indonesian. Findings of these questionnaires were not presented in this report.

As in previous surveys, data were collected by teams of interviewers. Altogether, 284 female interviewers, 86 male field supervisors, and 86 female field editors were recruited to form 86 interview teams. They were trained for 16 days in nine training centers during June to August 1997. The field supervisors and editors received additional training in supervisory tasks and editing techniques. Data collection took place from September to December 1997. For more information about the fieldwork, see Appendix A. A list of persons involved in the implementation of the survey is found in Appendix D. The survey questionnaires are reproduced in Appendix E.

As in the 1991 and 1994 IDHS, the 1997 IDHS was conducted in all 27 provinces in Indonesia. The sample was designed to produce estimates at the national, urban-rural, regional, and provincial levels. Table 1.2 is a summary of the results of the fieldwork for the IDHS from both the household and individual interviews by urban-rural residence. In general, the response rates for both the household and individual interviews in the 1997 IDHS are high. A total of 35,362 households were selected for the survey, of which 34,656 were found. Of the encountered households, 34,255 (99 percent) were successfully interviewed. In these households, 29,317 eligible women were identified, and complete interviews were obtained from 28,810 women, or 98 percent of all eligible women. The generally high response rates for both household and individual interviews were due mainly to the strict enforcement of the rule to revisit the originally selected household if no one was at home initially. No substitution for the originally selected households was allowed. Interviewers were instructed to make at least three visits in an effort to contact the household or eligible woman.

**Table 1.2 Results of the household and individual interviews**

Number of households, number of interviews and response rates, according to urban-rural residence, Indonesia 1997

Result	Residence		Total
	Urban	Rural	
<b>Household interviews</b>			
Households sampled	10,302	25,060	35,362
Households found	10,038	24,618	34,656
Households interviewed	9,897	24,358	34,255
<b>Household response rate</b>	98.6	98.9	98.8
<b>Individual interviews</b>			
Eligible women	8,253	21,064	29,317
Interviewed women	8,117	20,693	28,810
<b>Eligible woman response rate</b>	98.4	98.2	98.3



## CHAPTER 2

### HOUSEHOLD CHARACTERISTICS AND WOMEN'S SITUATION

The main objective of this chapter is to describe the general characteristics of the sample population, which include age and sex composition, residence, education, housing facilities, and ownership of durable goods. This information is not only useful by itself but can also be used to evaluate the quality of the 1997 IDHS data and to investigate changes in social and economic conditions over time. Data in this chapter will be presented for households, persons within households, and women eligible for the individual interview. The other objective of this chapter is to describe the environment in which the respondents (ever-married women age 15-49) and their children live. Factors believed to influence nuptiality, fertility, and contraceptive behavior, as well as maternal care and child morbidity and mortality, are discussed.

#### 2.1 Household Population by Age and Sex

The household questionnaire in the 1997 IDHS was used to list all household members, i.e., persons who usually live in the household. Information was obtained from an adult who was familiar with the characteristics of the other household members. In addition to providing a background against which various demographic processes are occurring, the age structure of the population incorporates the past history of the population.

The reliability of the age data depends on the reporting of birth dates. For persons whose year of birth was not known, age was obtained directly from the stated age. As shown in Figure 2.1, there is a preference for certain ages, particularly those ending in 0 or 5. Errors are more obvious among the population age 20 and over, partly because younger people tend to have more education than older people and are more likely to know their date of birth. To obtain the most accurate age reporting for respondents, the 1997 IDHS interviewers were instructed to (1) ask for legal documents or identity cards, (2) relate the respondent's age to the age of another household member whose age was known or to a household event whose date had been ascertained, or (3) relate the respondent's age to local or national events well known in the area. A chart used to convert reported dates from the Javanese, Sundanese, and Muslim calendars to the Gregorian calendar was appended to the interviewers' manual. The Javanese and Sundanese calendars are actually the same as the Muslim calendar except for the names of the months.

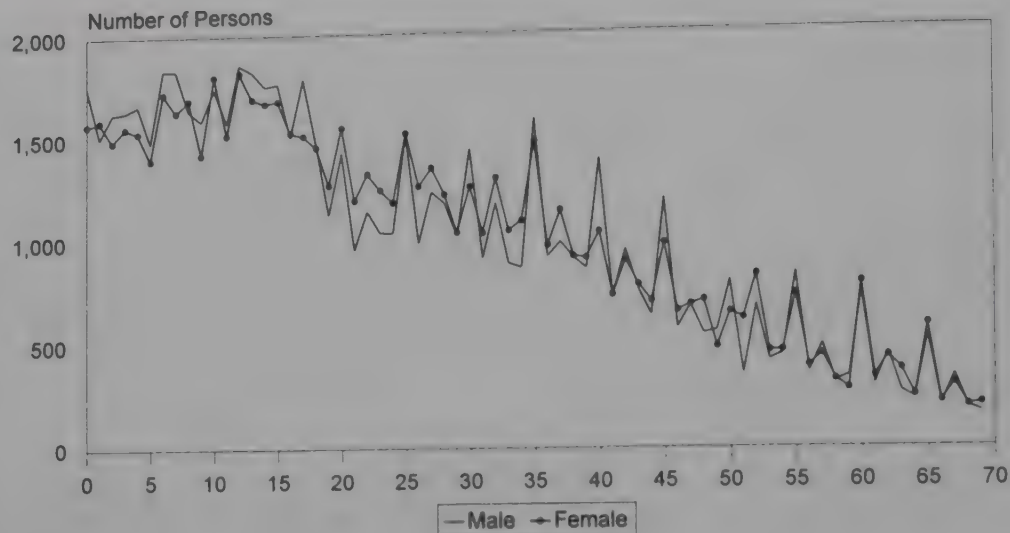
Table 2.1 and Figure 2.2 present the age distribution of the population by five-year age groups according to sex. Age composition is affected by past levels of fertility, mortality, and migration. The population pyramid has a narrow top and a wide base, reflecting a pattern typical of countries with relatively high fertility in the past. The narrowing at the base was brought about by a decline in fertility in the past decade.

#### 2.2 Population by Age from Other Sources

The percent distribution of the 1997 IDHS sample population by age group is presented in Table 2.2, along with comparable data from the 1980 Census, the 1985 Intercensal Population Survey (SUPAS), the 1987 National Indonesia Contraceptive Prevalence Survey (NICPS), the 1991 IDHS, and the 1994 IDHS. The percentage of the population under 15 years has decreased over time from 41 percent in 1980 to 34 percent in 1997. During the same period, the percentage of the population age 15-64 increased from 56 percent in 1980 to 62 percent in 1997. The dependency ratio, calculated as the ratio of nonproductive persons (under age 15 and age 65 and over) to persons age 15-64, has been decreasing gradually from 79 percent in 1980 to 62 percent in 1997. The smaller dependency ratio indicates a lessening of the economic burden on persons in the productive age groups who support those in the nonproductive age groups.



**Figure 2.1**  
**Number of Persons Reported at Each Age**  
**by Sex**



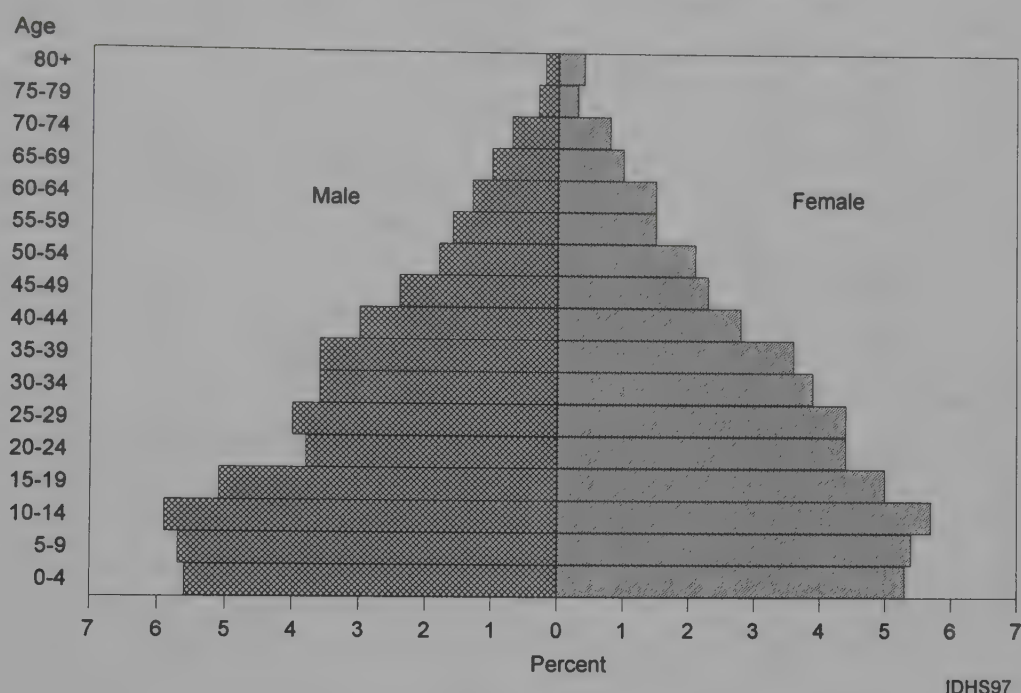
IDHS97

**Table 2.1 Household population by age, residence and sex**

Percent distribution of the de jure household population by five-year age groups, according to urban-rural residence and sex, Indonesia 1997

Age group	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	10.2	9.7	9.9	11.6	10.8	11.2	11.2	10.4	10.8
5-9	9.4	8.7	9.1	12.2	11.4	11.8	11.4	10.6	11.0
10-14	10.6	10.3	10.5	12.4	11.9	12.2	11.9	11.5	11.7
15-19	11.4	11.8	11.6	10.0	9.3	9.6	10.4	10.0	10.2
20-24	9.9	10.3	10.1	6.7	8.1	7.4	7.6	8.7	8.2
25-29	9.3	9.3	9.3	7.6	8.3	7.9	8.1	8.6	8.3
30-34	7.9	8.4	8.1	6.9	7.4	7.2	7.2	7.7	7.5
35-39	7.0	7.2	7.1	7.3	7.4	7.3	7.2	7.3	7.2
40-44	6.1	6.0	6.0	6.1	5.4	5.7	6.1	5.6	5.8
45-49	4.9	4.7	4.8	4.8	4.7	4.8	4.8	4.7	4.8
50-54	3.8	3.9	3.8	3.6	4.1	3.9	3.7	4.1	3.9
55-59	3.3	2.6	2.9	3.1	3.0	3.1	3.2	2.9	3.0
60-64	2.2	2.6	2.4	2.9	3.0	3.0	2.7	2.9	2.8
65-69	1.8	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0
70-74	1.3	1.2	1.2	1.6	1.7	1.6	1.5	1.5	1.5
75-79	0.5	0.6	0.6	0.7	0.5	0.6	0.6	0.6	0.6
80+	0.5	0.8	0.6	0.4	0.8	0.6	0.5	0.8	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	21,583	22,088	43,672	51,876	52,125	104,001	73,549	74,214	147,673

**Figure 2.2**  
**Population Pyramid of Indonesia**



**Table 2.2 Population by age from other sources**

Percent distribution of the population by age group, according to selected sources, Indonesia 1980-1997

Age group	1980 Census	1985 Supas	1987 NICPS	1991 IDHS	1994 IDHS	1997 IDHS
Less than 15	40.9	39.4	36.9	36.2	35.0	33.5
15-64	55.9	57.2	59.3	59.9	60.4	61.8
65 +	3.2	3.4	3.8	3.9	4.6	4.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Median age	-	-	-	21.5	22.8	23.7
Dependency ratio	79	73	69	67	66	62

## 2.3 Household Composition

Table 2.3 presents the percent distribution of households by various characteristics, such as sex of the head of the household, size of the household, and presence of foster children. The size and composition of the household may affect the allocation of financial resources among household members, which in turn would affect the overall well-being of the members. Household size may be associated with crowding in the dwelling, which can lead to unfavorable health conditions. Single-parent families, especially if they are headed by females, usually have limited financial resources.

Table 2.3 Household composition

Percent distribution of households by sex of head of household, household size, and whether household includes foster children, according to urban-rural residence, Indonesia 1997

Characteristic	Residence		Total
	Urban	Rural	
<b>Household headship</b>			
Male	86.5	88.3	87.8
Female	13.5	11.7	12.2
Total	100.0	100.0	100.0
<b>Number of usual members</b>			
1	6.1	4.3	4.8
2	10.6	11.9	11.5
3	17.6	21.2	20.2
4	20.3	22.7	22.1
5	18.5	17.7	18.0
6	12.1	10.8	11.1
7	6.9	5.9	6.2
8	3.7	2.9	3.2
9+	4.2	2.5	3.0
Total	100.0	100.0	100.0
<b>Mean size</b>	4.5	4.3	4.3
<b>Percent with foster children</b>	4.7	6.1	5.7

Note: Table is based on de jure members, i.e., usual residents.

The 1997 IDHS shows that 12 percent of households are headed by women. The proportion is slightly higher in urban than in rural areas (14 percent, compared with 12 percent). Seven in ten households have between two and five members. The average household size is 4.3 persons, 4.5 persons in urban areas, and 4.3 persons in rural areas. Six percent of households include one or more children under age 15 who are living with neither their natural father nor their natural mother.

## 2.4 Level of Education of the Household Population

Educational attainment is closely associated with other socioeconomic factors and demographic behavior such as income, lifestyle, reproductive behavior, use of contraception, health status of children, and housing conditions. Education also influences the individual's views, and can open the mind to new ideas and technology.

Tables 2.4.1 and 2.4.2 indicate that among both men and women there are significant differences in level of education, by background characteristics. Overall, men are slightly better educated than women: nine in ten men have had some schooling compared with eight in ten women. In addition, while 34 percent of men have had some secondary education, the corresponding figure for women is 27

percent. The proportion of men and women who have only some primary schooling is almost the same, 34 percent each, and the proportion of men and women who completed only primary education is 21 percent and 20 percent, respectively. The gap in educational attainment is no longer visible among the youngest age cohort. Among boys and girls age 5-14, the median duration of schooling is very similar—1.0 and 1.2 years, respectively, for children age 5-9, and 5.3 and 5.5 years, respectively, for children age 10-14. These figures imply that in recent years, girls have had as much opportunity as boys to pursue education.

Tables 2.4.1 and 2.4.2 also show that educational attainment is negatively associated with age; older persons are more likely to have no education and to stay in school for shorter periods. For example, the median duration of schooling among men age 50-54 years is 6.2 years, whereas for men age 20-24 the median is 9.2 years. The difference for women is even more striking; 2.1 years for age 50-54 years and 7.0 years for age 20-24. Urban residents are much more likely to attend school and stay in school than residents of rural areas. Only 5 percent of men in urban areas have never gone to school, while the proportion in rural areas is more than double (13 percent). For women, the corresponding figures are 11 percent in the urban areas and 23 percent in the rural areas. The urban-rural difference is more pronounced at the level of secondary or higher education. The median years of schooling for urban men is 8.0 years, compared with 5.9 years for rural men. Urban women spend 2.4 years longer in school than their rural counterparts (6.8 years and 4.4 years, respectively).



Table 2.4.1 Educational level of the household population by background characteristics: men

Percent distribution of the de jure male household population age five and over by highest level of education attended, and median number of years of schooling, according to selected background characteristics, Indonesia 1997

Background characteristic	No education	Some primary	Completed primary	Some secondary +	Total	Number	Median years of schooling
<b>Age</b>							
5-9	28.8	70.9	0.0	0.2	100.0	8,377	1.0
10-14	1.3	64.5	6.9	27.3	100.0	8,734	5.3
15-19	1.4	13.1	23.3	62.2	100.0	7,660	8.4
20-24	2.1	10.5	29.7	57.6	100.0	5,613	9.2
25-29	2.2	12.7	28.7	56.4	100.0	5,947	9.2
30-34	4.6	20.0	27.9	47.4	100.0	5,275	6.9
35-39	7.3	27.5	29.3	35.9	100.0	5,258	6.5
40-44	8.3	31.0	30.2	30.4	100.0	4,461	6.4
45-49	9.8	28.6	30.0	31.5	100.0	3,545	6.4
50-54	16.1	28.8	28.7	26.5	100.0	2,699	6.2
55-59	19.0	30.9	27.5	22.5	100.0	2,340	6.0
60-64	31.8	33.7	19.9	14.4	100.0	1,991	3.4
65 +	38.3	33.6	19.3	8.7	100.0	3,330	2.7
<b>Residence</b>							
Urban	5.2	23.1	16.6	55.2	100.0	19,390	8.0
Rural	13.2	38.4	22.7	25.7	100.0	45,873	5.9
<b>Region/Residence</b>							
Java-Bali	11.4	32.8	23.2	32.6	100.0	39,755	6.3
Urban	5.4	22.6	18.6	53.5	100.0	13,617	7.5
Rural	14.5	38.1	25.6	21.8	100.0	26,157	5.7
Outer Java-Bali I	9.7	36.0	17.0	37.3	100.0	17,576	6.2
Urban	4.5	24.2	12.1	59.1	100.0	4,042	9.0
Rural	11.3	39.5	18.4	30.8	100.0	13,534	6.0
Outer Java-Bali II	10.3	34.6	17.9	37.0	100.0	7,912	6.3
Urban	4.8	24.4	11.2	59.5	100.0	1,731	9.0
Rural	11.8	37.5	19.8	30.7	100.0	6,181	6.1
Total <sup>1</sup>	10.8	33.9	20.9	34.4	100.0	65,262	6.3

<sup>1</sup> Includes cases with missing values on age.

Tables 2.4.3 and 2.4.4 present the differentials in educational attainment by region and province for men and women, respectively. The median duration of schooling for men is longer than that for women in all provinces except in North Sulawesi. In general, there are no significant differentials in median years of schooling of men by region (see Table 2.4.3). Table 2.4.4 shows that for women, the median duration of schooling is shortest in Java-Bali (5.4 years), while in Outer Java-Bali it is 5.8 years or longer.

Level of education varies between provinces in Java-Bali. Men and women in DKI Jakarta have the longest duration of schooling (9.5 years and 7.9 years, respectively), while Central Java has the shortest median for men (6.1 years), and East Java has the shortest duration for women (4.6 years).

Table 2.4.2 Educational level of the household population by background characteristics:  
women

Percent distribution of the de jure female household population age five and over by highest level of education attended, and median number of years of schooling, according to selected background characteristics, Indonesia 1997

Background characteristic	No education	Some primary	Completed primary	Some secondary +	Total	Number	Median years of schooling
<b>Age</b>							
5-9	26.9	72.9	0.0	0.1	100.0	7,861	1.2
10-14	1.3	61.1	7.5	30.2	100.0	8,495	5.5
15-19	1.6	11.9	27.2	59.3	100.0	7,445	8.5
20-24	2.9	13.1	35.0	49.0	100.0	6,495	7.0
25-29	6.9	17.1	31.5	44.3	100.0	6,381	6.8
30-34	11.7	29.4	27.6	31.3	100.0	5,724	6.3
35-39	17.5	35.5	26.4	20.7	100.0	5,421	5.6
40-44	19.4	34.6	23.5	22.5	100.0	4,150	5.4
45-49	27.6	32.9	23.0	16.4	100.0	3,505	4.2
50-54	44.6	27.1	16.5	11.8	100.0	3,013	2.1
55-59	50.6	26.2	13.1	10.1	100.0	2,169	0.0
60-64	61.6	23.4	9.1	5.8	100.0	2,171	0.0
65+	74.4	15.0	7.4	3.1	100.0	3,630	0.0
<b>Residence</b>							
Urban	10.7	24.9	17.3	47.1	100.0	19,951	6.8
Rural	23.0	37.4	20.5	19.0	100.0	46,529	4.4
<b>Region/Residence</b>							
Java-Bali	21.4	32.6	20.9	25.1	100.0	40,878	5.4
Urban	11.7	25.0	18.5	44.8	100.0	14,163	6.7
Rural	26.4	36.6	22.1	14.9	100.0	26,715	4.0
Outer Java-Bali I	15.9	35.4	17.2	31.7	100.0	17,941	5.9
Urban	8.1	24.4	14.9	52.6	100.0	4,142	7.1
Rural	18.3	38.7	17.8	25.2	100.0	13,798	5.0
Outer Java-Bali II	16.4	35.6	17.9	29.8	100.0	7,660	5.8
Urban	8.0	25.6	12.8	53.6	100.0	1,645	7.6
Rural	19.0	38.3	19.3	23.4	100.0	6,015	5.0
<b>Total<sup>1</sup></b>	<b>19.4</b>	<b>33.7</b>	<b>19.5</b>	<b>27.4</b>	<b>100.0</b>	<b>66,479</b>	<b>5.6</b>

<sup>1</sup> Includes cases with missing values on age.

In Outer Java-Bali I, for both men and women, West Nusa Tenggara shows the lowest median duration of schooling (4.8 years for men and 3.7 years for women). The highest median duration of schooling for men is in North Sumatra (6.5 years) and in North Sulawesi for women (6.5 years). The provincial differentials in median duration of schooling in Outer Java-Bali I are not as large for men as for women (1.7 years versus 2.8 years).

Among provinces in Outer Java-Bali II, the highest median duration of schooling is in East Kalimantan—6.9 years for men and 6.4 years for women. The median duration of schooling is relatively low in East Timor—2.9 years for men and 1.6 years for women.

**Table 2.4.3 Educational level of the household population by region and province: men**

Percent distribution of the de jure male household population age five and over by highest level of education attended, and median number of years of schooling, according to region and province, Indonesia 1997

Region and province	No education	Some primary	Completed primary	Some secondary +	Total	Number	Median years of schooling
<b>Java-Bali</b>	11.4	32.8	23.2	32.6	100.0	39,775	6.3
DKI Jakarta	4.1	18.7	13.0	64.2	100.0	2,669	9.5
West Java	11.3	33.9	25.1	29.6	100.0	13,369	6.2
Central Java	12.3	35.5	24.5	27.7	100.0	10,314	6.1
DI Yogyakarta	9.9	24.9	15.2	50.1	100.0	1,103	6.8
East Java	12.5	33.7	23.2	30.7	100.0	11,338	6.2
Bali	11.5	26.5	21.4	40.5	100.0	981	6.5
<b>Outer Java-Bali I</b>	9.7	36.0	17.0	37.3	100.0	17,576	6.2
Dista Aceh	10.3	32.9	20.0	36.7	100.0	1,312	6.3
North Sumatra	7.0	33.2	16.1	43.7	100.0	3,893	6.5
West Sumatra	5.9	36.7	15.1	42.4	100.0	1,333	6.4
South Sumatra	6.3	35.9	18.9	38.9	100.0	2,210	6.4
Lampung	8.0	41.1	20.3	30.6	100.0	2,282	6.1
West Nusa Tenggara	18.2	39.6	12.6	29.6	100.0	1,165	4.8
West Kalimantan	12.2	39.3	13.5	35.0	100.0	1,215	5.9
South Kalimantan	6.1	35.4	21.9	36.6	100.0	890	6.4
North Sulawesi	4.1	38.7	17.2	39.9	100.0	825	6.4
South Sulawesi	18.4	32.7	14.7	34.2	100.0	2,451	5.8
<b>Outer Java-Bali II</b>	10.3	34.6	17.9	37.0	100.0	7,912	6.3
Riau	8.9	36.6	17.0	37.5	100.0	1,194	6.3
Jambi	8.2	33.1	24.3	34.4	100.0	920	6.4
Bengkulu	7.1	39.5	15.1	38.4	100.0	479	6.2
East Nusa Tenggara	14.1	38.2	19.5	28.2	100.0	1,246	5.7
East Timor	36.5	32.5	5.7	25.2	100.0	311	2.9
Central Kalimantan	7.9	34.2	24.5	33.4	100.0	592	6.3
East Kalimantan	6.7	30.1	12.4	50.7	100.0	818	6.9
Central Sulawesi	6.5	32.2	24.3	36.8	100.0	631	6.4
Southeast Sulawesi	9.9	34.9	14.4	41.0	100.0	451	6.3
Maluku	6.6	34.2	16.2	43.0	100.0	660	6.6
Irian Jaya	13.3	32.4	13.9	40.4	100.0	610	6.4
<b>Total</b>	10.8	33.9	20.9	34.4	100.0	65,262	6.3

## 2.5 School Enrollment

Table 2.5 shows the percentage of the household population age 5 to 24 years enrolled in school, according to age, sex, and residence. The data confirm the findings presented in Tables 2.4.1 and 2.4.2; differences between boys and girls at the younger age groups are minimal (see Figure 2.3). While only two in five children age 5-6 are in school, almost all children age 7-12 are enrolled in school. This reflects the result of the 6 years of compulsory education that was initiated in the first Long-Term Development Plan (1969-70 to 1993-94). The proportion decreases for the older age groups. Table 2.5 indicates that at all ages, school enrollment rates are higher in urban than in rural areas.

School enrollment rates have generally increased in recent years. For example, the proportion of children age 7-15 enrolled in school has increased from 83 percent in 1994 to 87 percent in 1997 (CBS et al., 1995:19).



Table 2.4.4 Educational level of the household population by region and province: women

Percent distribution of the de jure female household population age five and over by highest level of education attended, and median number of years of schooling, according to region and province, Indonesia 1997

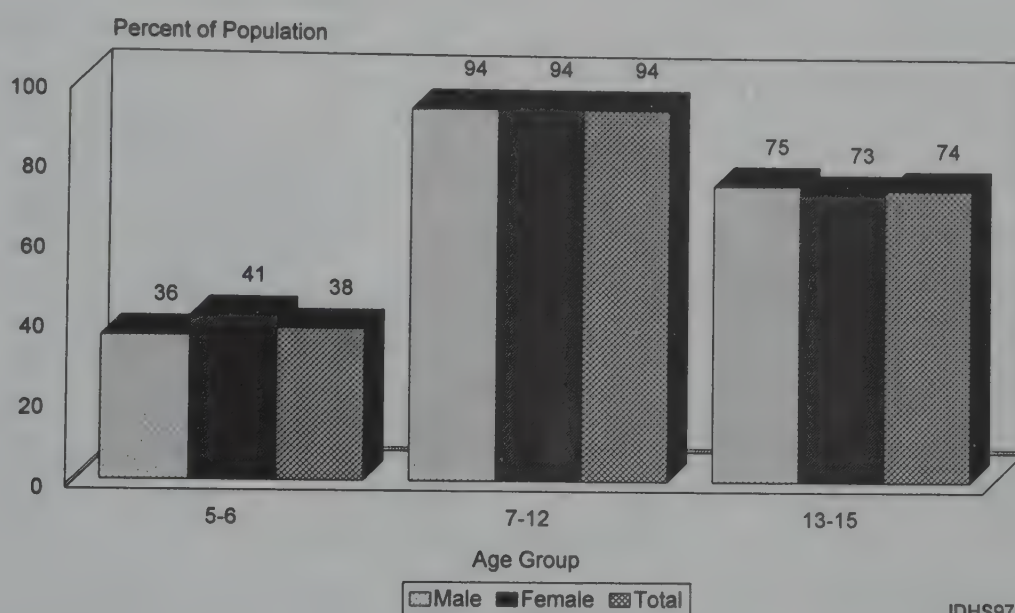
Region and province	No education	Some primary	Completed primary	Some secondary +	Total	Number	Median years of schooling
<b>Java-Bali</b>	21.4	32.6	20.9	25.1	100.0	40,878	5.4
DKI Jakarta	7.0	20.8	18.1	54.0	100.0	2,773	7.9
West Java	19.1	36.1	23.3	21.5	100.0	13,171	5.4
Central Java	21.8	35.0	21.2	21.9	100.0	10,514	4.8
DI Yogyakarta	24.3	23.3	13.7	38.7	100.0	1,180	6.2
East Java	26.0	30.8	19.4	23.7	100.0	12,227	4.6
Bali	26.7	25.7	20.0	27.6	100.0	1,014	5.4
<b>Outer Java-Bali I</b>	15.9	35.4	17.2	31.7	100.0	17,941	5.9
Dista Aceh	16.2	32.8	20.1	31.0	100.0	1,348	6.1
North Sumatra	10.6	33.4	17.7	38.0	100.0	3,945	6.3
West Sumatra	9.5	36.9	14.1	39.5	100.0	1,443	6.2
South Sumatra	13.8	36.0	19.0	31.2	100.0	2,162	6.0
Lampung	15.8	41.2	17.5	25.4	100.0	2,073	5.2
West Nusa Tenggara	29.6	35.3	12.5	22.6	100.0	1,337	3.7
West Kalimantan	24.4	37.3	10.8	27.5	100.0	1,158	4.1
South Kalimantan	14.8	36.3	19.0	29.8	100.0	945	6.0
North Sulawesi	4.5	36.8	17.1	41.6	100.0	811	6.5
South Sulawesi	22.1	31.9	19.1	27.0	100.0	2,718	5.2
<b>Outer Java-Bali II</b>	16.4	35.6	17.9	29.8	100.0	7,660	5.8
Riau	16.5	35.9	15.7	32.0	100.0	1,136	5.7
Jambi	16.8	33.7	21.5	28.0	100.0	904	6.1
Bengkulu	16.1	41.5	11.8	30.7	100.0	466	5.0
East Nusa Tenggara	20.4	35.4	23.1	21.1	100.0	1,223	5.2
East Timor	43.8	32.5	4.6	19.2	100.0	315	1.6
Central Kalimantan	13.1	39.8	23.3	23.8	100.0	568	5.7
East Kalimantan	10.4	33.6	14.5	41.6	100.0	764	6.4
Central Sulawesi	9.3	33.8	24.6	32.3	100.0	617	6.3
Southeast Sulawesi	16.6	34.5	15.3	33.8	100.0	482	5.9
Maluku	9.0	37.7	17.6	35.7	100.0	636	6.2
Irian Jaya	20.0	35.0	13.3	31.7	100.0	549	5.4
<b>Total</b>	19.4	33.7	19.5	27.4	100.0	66,479	5.6

Table 2.5 School enrollment

Percentage of the de jure household population age 5-24 years enrolled in school, by age group, sex, and urban-rural residence, Indonesia 1997

Age group	Male			Female			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
5-6	45.6	32.8	35.8	45.3	39.2	40.7	45.4	35.9	38.2
7-12	96.7	92.7	93.7	96.9	93.0	93.8	96.8	92.8	93.7
13-15	87.4	70.0	74.9	85.0	68.2	73.3	86.2	69.1	74.1
7-15	93.2	85.2	87.2	92.4	84.9	86.8	92.8	85.0	87.0
16-18	63.8	36.2	45.3	63.0	30.8	42.0	63.4	33.6	43.6
19-24	27.1	8.9	15.8	22.7	7.1	12.7	24.8	7.9	14.1

**Figure 2.3**  
**Percentage of Population Age 5-15**  
**Enrolled in School by Age Group and Sex**



## 2.6 Housing Characteristics

Table 2.6 presents the distribution of households by selected housing characteristics, such as the source of drinking water, type of sanitation facilities, type of flooring, and distance between the well and the cesspool. These are important determinants of the health status of household members, particularly children. They can also be used as indicators of household socioeconomic status. Proper hygiene and sanitation practices can help to prevent major childhood diseases, such as diarrhea.

Overall, 80 percent of the households covered in the 1997 IDHS have electricity, a large increase from the 63 percent found in 1994 (CBS et al., 1995:21). There are significant urban-rural and regional differentials (see Figure 2.4). In urban areas, virtually all households have electricity, compared with 73 percent in rural areas. While 89 percent of households in Java-Bali have electricity, in Outer Java-Bali I the proportion is about 69 percent, and in Outer Java-Bali II it is only 55 percent.

Wells are the main source of drinking water for almost half of the households in the 1997 IDHS sample. Water that is either piped into the residence or into the yard or obtained from the public tap is used by 18 percent of households: 42 percent in urban areas and 8 percent in rural areas. Other sources of drinking water include springs, either protected or unprotected (15 percent), and pump (13 percent). Rural households are much more likely to use spring water than urban households (21 percent, compared with 1 percent, respectively). On the other hand, pumps are more common in urban areas (23 percent) than in rural areas (9 percent). Rivers, streams, and rainwater are the main sources for one-fifth of households in Outer Java-Bali II, one-tenth of households in Outer Java-Bali I, and 3 percent of households in Java-Bali.

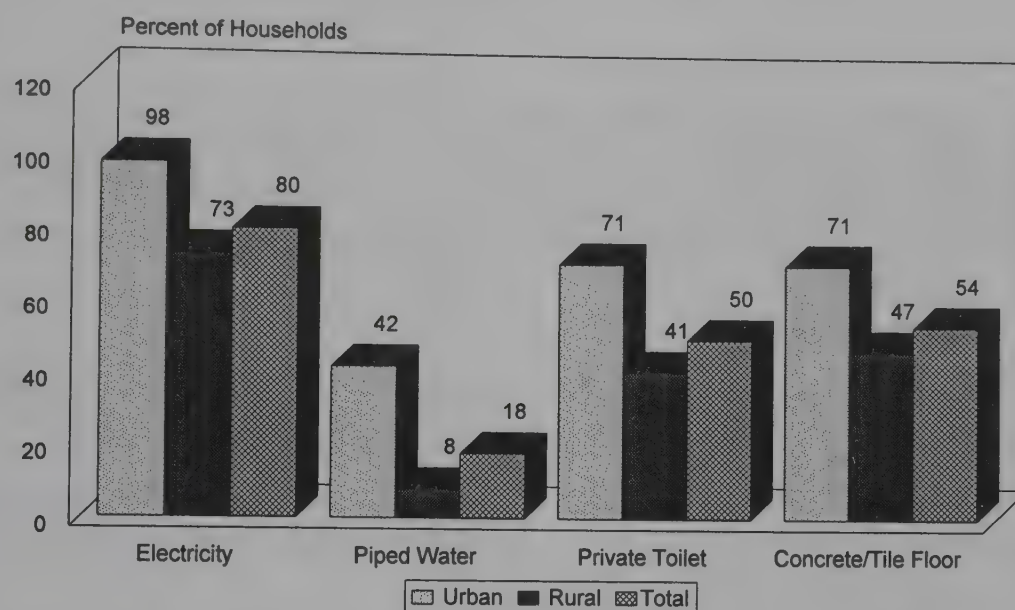
Table 2.6 Housing characteristics

Percent distribution of households by housing characteristics, according to urban-rural residence and region, Indonesia 1997

Characteristic	Residence		Region			Total
	Urban	Rural	Java Bali	Outer Java- Bali I	Outer Java- Bali II	
<b>Electricity</b>						
Yes	97.5	73.3	88.9	69.1	54.8	80.2
No	2.5	26.7	11.1	30.9	45.2	19.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Source of drinking water</b>						
Piped into residence	28.9	4.0	9.6	13.7	13.7	11.1
Piped into yard/plot	4.6	1.2	1.3	3.5	3.8	2.2
Public tap	8.3	3.2	4.6	4.9	4.4	4.7
Pump	23.1	8.7	17.5	4.8	3.8	12.8
Protected well	25.7	36.5	35.1	32.8	24.9	33.4
Unprotected well	6.7	16.8	11.8	18.5	15.9	14.0
Protected spring	0.6	11.4	9.6	6.3	6.0	8.3
Unprotected spring	0.7	9.1	7.4	4.9	7.2	6.8
River/stream	0.4	6.6	2.5	6.7	14.7	4.9
Rainwater	0.9	2.3	0.5	3.8	5.4	1.9
Other	0.0	0.1	0.0	0.1	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Time to water source</b>						
On premises	81.8	46.6	61.6	51.6	39.3	56.6
1-4 minutes	6.6	10.9	9.6	10.1	9.3	9.7
5-9 minutes	5.9	16.2	11.1	16.4	18.4	13.3
10+ minutes	5.6	26.1	17.6	21.8	32.8	20.3
Don't know/missing	0.2	0.1	0.2	0.1	0.1	0.1
Total	100.00	100.0	100.0	100.0	100.0	100.0
Median time to source	-	2.3	-	-	5.1	-
<b>Sanitation facility</b>						
Private with septic	51.4	17.0	28.6	25.6	19.3	26.8
Private, no septic	19.1	24.2	19.5	26.3	33.1	22.7
Shared, public toilet	14.0	9.2	12.5	6.8	8.0	10.6
River, stream, creek	13.6	32.2	30.1	22.4	19.4	27.0
Pit	0.3	4.4	2.4	5.8	2.4	3.3
Bush/forest/yard	0.5	11.2	6.3	11.6	11.3	8.2
Other	1.1	1.5	0.5	1.5	6.2	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Distance from well to cesspool</b>						
No well	44.5	38.0	35.6	43.9	55.5	39.8
Less than 10 meters	20.6	12.7	16.9	13.2	7.2	14.9
10-14 meters	15.1	12.8	13.9	14.0	9.7	13.4
15 meters and over	9.0	19.3	16.1	16.5	17.7	16.4
Don't know/missing	10.8	17.3	17.6	12.4	9.8	15.4
Total	10.2	11.1	10.6	10.8	15.1	10.7
Median distance to cesspool	100.0	100.0	100.0	100.0	100.0	100.0
<b>Floor material</b>						
Earth	5.0	28.6	25.8	13.3	19.2	21.9
Bamboo	0.5	3.2	2.7	1.5	3.2	2.4
Wood	7.2	18.0	4.0	33.8	35.0	14.9
Concrete/brick	43.3	35.0	34.5	44.8	37.0	37.4
Tile	27.8	12.2	23.5	4.9	3.8	16.6
Ceramic/marble	16.1	2.7	9.3	1.6	1.4	6.5
Other	0.1	0.2	0.2	0.0	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Floor area</b>						
< 10 square meters	28.5	27.5	20.6	38.2	44.8	27.7
10+ square meters	70.7	72.0	78.5	61.6	54.7	71.6
Missing/Don't know	0.8	0.6	0.9	0.2	0.3	0.6
Total	14.4	14.5	16.5	12.1	10.6	14.5
Median area of floor	100.0	100.0	100.0	100.0	100.0	100.0
<b>Number of households</b>	9,787	24,468	21,864	8,671	3,719	34,255



**Figure 2.4**  
**Housing Characteristics by Residence**



The data in Table 2.6 indicate that for more than half of households, the source of drinking water is on the premises, while for 23 percent the source is less than 10 minutes away, and for 20 percent of the households the source is 10 or more minutes away. Urban households generally are closer to the source of drinking water than rural households. While 82 percent of households in urban areas have water on the premises and 13 percent are within 10 minutes of the source, in rural areas the corresponding figures are 47 percent and 27 percent, respectively. Households in Java-Bali and in Outer Java-Bali I are generally closer to the source of drinking water than households in Outer Java-Bali II. While more than half of households in Java-Bali and in Outer Java-Bali I have water on the premises, in Outer Java-Bali II the corresponding proportion is less than 40 percent.

Half of households have a private toilet, 11 percent use a shared facility, and the remaining 40 percent do not have a toilet. The majority of people who do not have a toilet facility go to a river, stream, or creek. The difference between urban and rural areas is significant. Overall, 71 percent of households in urban areas have a private toilet, compared with 41 percent in rural areas. Basically, the distribution of households by type of toilet facility among regions are almost the same, except for the proportion of households that go to a river, stream, or creek (almost one-third of households in Java-Bali and around one-fifth of households in Outer Java-Bali I and in Outer Java-Bali II).

Table 2.6 presents the distribution of households by the distance from the well to the nearest cesspool. Overall, for 15 percent of the households, the nearest cesspool is less than 10 meters from their well, while for 13 percent the nearest cesspool is between 10 and 14 meters, and for 16 percent the nearest cesspool is 15 meters or further from the well. In general, wells are slightly closer to cesspools in urban areas than in rural areas, and in Java-Bali and Outer Java-Bali I than in Outer Java-Bali II.

More than half of households in Indonesia live in dwellings with a concrete, brick, or tile floor, while 15 percent have a wood floor, and 22 percent have a dirt floor. There are substantial urban-rural differentials

by floor materials. Whereas 71 percent of urban households have a concrete, brick, or tile floor, the proportion in rural areas is 47 percent. Conversely, 29 percent of rural households have a dirt floor, compared with 5 percent in urban areas. There are also substantial regional variations. In Java-Bali, the majority of the households (58 percent) have concrete or tile floors, while in the Outer Java-Bali regions it is less than 50 percent. In the Outer Java-Bali regions, wood is commonly used as floor material (34-35 percent).

Seven in ten households live in dwellings with 10 square meters or more of floor space. The difference between urban and rural households is not significant (71 percent and 72 percent, respectively). However, households in Java-Bali in general have more space than those in other regions do. Almost half of households in Outer Java-Bali II live in houses with less than 10 square meters of floor area.

2.7 Household Durable Goods

The presence of durable goods in the household, e.g., radio, television, motorcycle, and private car, is an indicator of the household's socioeconomic status. Table 2.7 shows that 62 percent of households have a radio, 48 percent have a television, 11 percent have a refrigerator, 48 percent have a bicycle or boat, and 21 percent have a motorcycle or motorboat. Only 4 percent of households have a private car. About 20 percent of households have none of the durable goods listed in Table 2.7.

Urban-rural differentials can be seen in the ownership of specific durable goods. In general, these goods are more available in urban households than in rural households. For example, three in four urban households have a television set, while in rural areas the proportion is only 37 percent. A refrigerator is available in 30 percent of urban households, but it is almost nonexistent in rural areas. Urban households are five times more likely to own a private car than rural households.

Table 2.7 Household durable goods			
Percentage of households possessing various durable consumer goods, by urban-rural residence, Indonesia 1997			
Durable goods	Residence		Total
	Urban	Rural	
Radio	74.5	56.7	61.8
Television	74.5	37.3	47.9
Refrigerator	30.2	3.8	11.3
Bicycle/Boat	48.1	47.2	47.5
Motorcycle/Motorboat	30.8	16.5	20.6
Private car	10.1	2.0	4.3
None of the above	10.9	23.4	19.8
Number of households	9,787	24,468	34,255

2.8 Respondents' Background Characteristics

Table 2.8.1 presents the distribution of ever-married women age 15-49 by selected background characteristics along with the actual and weighted number of eligible women interviewed. The weighting is necessary to compensate for differences in the selection probabilities and response rates, and to make the regional and urban-rural distribution of the sample correspond to that expected from official sources. All results presented in this report are weighted.

The distribution of ever-married women by age group is similar to that for the 1987 NICPS, the 1990 Population Census, and the 1991 and 1994 IDHS. The majority of respondents are age 25-39 (56 percent), while less than 5 percent are age 15-19, and about 12 percent are age 45-49. Ninety-three percent of the women in the sample are currently married; the remaining 7 percent are either divorced or widowed. Seventy-two percent of respondents live in rural areas and 28 percent in urban areas.



Thirteen percent of the survey respondents have never attended school, 28 percent have some primary education but did not finish primary school, 31 percent stopped after completing primary school, and 28 percent have some secondary or higher education. A majority of the women surveyed are Muslim (90 percent), 8 percent are Protestant or Catholic, 2 percent are Hindu, and less than one percent are Buddhist.

Table 2.8.2 presents the weighted and unweighted distribution of the respondents by region and province. The table shows that the majority of respondents (63 percent) live in Java-Bali, while 26 percent live in Outer Java-Bali I, and 11 percent live in Outer Java-Bali II. The provinces of East Java and West Java account for 20 percent of respondents each; 16 percent reside in Central Java.

## 2.9 Respondents' Level of Education by Background Characteristics

The distribution of respondents by education and selected background characteristics is presented in Table 2.9.1. Comparison across cohorts shows that urban and younger women are more likely to have higher education than their rural and older counterparts. For example, while 27 percent of women age 45-49 never went to school, the proportion among women 15-19 is less than 3 percent. On the other hand, three-quarters of women age 15-19 have completed primary school, compared to only 39 percent of women in the oldest age group. Only 5 percent of respondents in urban areas have not attended school; in rural areas the percentage is 16 percent. By contrast, half of urban women have attended secondary school, compared with 19 percent in rural areas.

There is no significant variation in women's educational attainment across regions. Comparison of women's educational attainment by province, however, reveals more pronounced variations (see Table 2.9.2). The proportion of women who have never gone to school varies from less than 5 percent in North Sulawesi, West Sumatra, DKI Jakarta, Central Sulawesi, and Maluku, to more than 20 percent in Bali, West Kalimantan, West Nusa Tenggara, Irian Jaya, and East Timor. In the latter province, 54 percent of women have had no formal education.

**Table 2.8.1 Distribution of respondents: background characteristics**

Percent distribution of ever-married women by selected background characteristics, Indonesia 1997

Background characteristic	Weighted percent	Number of ever-married women	
		Weighted	Un-weighted
<b>Age</b>			
15-19	4.5	1,310	1,103
20-24	14.1	4,061	4,041
25-29	19.0	5,463	5,630
30-34	18.7	5,375	5,364
35-39	18.0	5,198	5,269
40-44	13.9	4,003	3,945
45-49	11.8	3,399	3,458
<b>Marital status</b>			
Married	93.3	26,886	26,833
Divorced	3.4	974	955
Widowed	3.3	951	1,022
<b>Residence</b>			
Urban	27.9	8,033	8,117
Rural	72.1	20,777	20,693
<b>Region/Residence</b>			
Java-Bali	62.6	18,039	8,735
Urban	19.9	5,722	3,875
Rural	42.9	12,317	4,860
Outer Java-Bali I	26.3	7,550	10,854
Urban	5.6	1,625	2,409
Rural	20.7	5,925	8,445
Outer Java-Bali II	11.1	3,221	9,221
Urban	2.4	686	1,833
Rural	8.8	2,534	7,388
<b>Education</b>			
No education	13.2	3,807	3,866
Some primary	27.7	7,955	7,421
Completed primary	31.1	8,958	7,864
Some secondary +	28.0	8,090	9,659
<b>Religion</b>			
Muslim	89.6	25,801	22,749
Protestant/Christian	5.2	1,489	2,543
Catholic	2.7	790	1,898
Hindu	1.7	503	1,297
Buddhist	0.7	189	261
Other	0.1	37	61
<b>Total</b>	<b>100.0</b>	<b>28,810</b>	<b>28,810</b>



## 2.10 Access to Mass Media

The availability of mass media (newspaper, television and radio) is presented in Table 2.10.1. One in four respondents read the newspaper weekly, more than three in four watch television weekly, and one in two listen to the radio every day. While one in six have access to all three mass media, the same proportion are exposed to none of these mass media. Younger women, women in urban areas, and better educated women are more likely to have access to mass media than other women are. For example, 92 percent of urban women watch television, while the proportion in rural areas is 73 percent; 26 percent of urban women are exposed to all three media, while in rural areas only 11 percent are. There is a positive association between level of education and exposure to mass media: as education increases, access to mass media increases. The same pattern was found in the 1991 IDHS and the 1994 IDHS (CBS et al., 1992 and CBS et al., 1995).

Table 2.10.2 shows the percentage of women who have access to mass media according to region and province. While women in Java-Bali are more exposed to television than women in Outer Java-Bali, women in Outer Java-Bali II are more exposed to newspaper than women in other regions, and women in Outer Java-Bali I are more exposed to radio broadcast than women in other regions. Women in DKI Jakarta are the most likely to watch television (97 percent), followed by East Kalimantan (94 percent), and DI Yogyakarta (90 percent). At the other extreme, women in East Nusa Tenggara are least likely to watch television (24 percent).

Table 2.8.2 Distribution of respondents: region and province

Percent distribution of ever-married women by region and province, Indonesia 1997

Region and province	Weighted percent	Number of ever-married women	
		Weighted	Un-weighted
<b>Java-Bali</b>	62.6	18,039	8,735
DKI Jakarta	4.0	1,152	1,784
West Java	19.7	5,691	1,590
Central Java	16.1	4,634	1,482
DI Yogyakarta	1.5	439	1,063
East Java	19.8	5,681	1,530
Bali	1.5	442	1,286
<b>Outer Java-Bali I</b>	26.3	7,550	10,854
Dista Aceh	2.0	570	1,147
North Sumatra	5.9	1,687	1,407
West Sumatra	1.9	543	905
South Sumatra	3.3	942	1,102
Lampung	3.2	913	1,003
West Nusa Tenggara	2.1	595	1,105
West Kalimantan	1.7	479	1,001
South Kalimantan	1.5	433	1,056
North Sulawesi	1.2	340	860
South Sulawesi	3.7	1,049	1,268
<b>Outer Java-Bali II</b>	11.1	3,221	9,221
Riau	1.7	477	1,004
Jambi	1.4	416	866
Bengkulu	0.7	192	763
East Nusa Tenggara	1.7	489	833
East Timor	0.4	120	920
Central Kalimantan	0.8	238	765
East Kalimantan	1.2	363	856
Central Sulawesi	0.9	270	880
Southeast Sulawesi	0.6	178	731
Maluku	0.8	235	809
Irian Jaya	0.8	242	794
<b>Total</b>	100.0	28,810	28,810

## 2.11 Employment

In the 1997 IDHS, respondents were asked if they worked aside from doing their housework, regardless of whether they were paid or not. Table 2.11.1 shows that one in two women were engaged in an economic activity in the last 12 months. Older women, women in rural areas, and women who have no education are more likely to have been employed. For example, the proportion of women 35 years or older who worked is around 60 percent, while for women under 25 the proportion is under 35 percent. The smaller proportion of young women who work may be related to the problem of securing child care, while urban and better educated women are generally younger and thus less likely to work.

**Table 2.9.1 Level of education: background characteristics**

Percent distribution of ever-married women by the highest level of education attended, according to selected background characteristics, Indonesia 1997

Background characteristic	Highest level of education				Total	Number of women
	No education	Some primary	Completed primary	Some secondary +		
<b>Age</b>						
15-19	2.7	19.3	52.6	25.4	100.0	1,310
20-24	3.3	16.7	43.8	36.1	100.0	4,061
25-29	6.8	18.4	34.8	40.0	100.0	5,463
30-34	12.0	30.5	28.2	29.4	100.0	5,375
35-39	17.7	35.7	26.2	20.4	100.0	5,198
40-44	19.5	35.0	23.3	22.3	100.0	4,003
45-49	27.3	33.5	23.0	16.2	100.0	3,399
<b>Residence</b>						
Urban	5.0	17.9	26.6	50.5	100.0	8,033
Rural	16.4	31.4	32.8	19.4	100.0	20,777
<b>Region/Residence</b>						
Java-Bali	13.8	27.9	33.7	24.6	100.0	18,039
Urban	5.4	18.7	28.9	47.0	100.0	5,722
Rural	17.7	32.2	35.9	14.2	100.0	12,317
Outer Java-Bali I	11.8	28.2	26.0	34.0	100.0	7,550
Urban	4.2	15.2	21.8	58.7	100.0	1,625
Rural	13.9	31.7	27.2	27.2	100.0	5,925
Outer Java-Bali II	13.5	24.9	28.4	33.2	100.0	3,221
Urban	3.8	16.9	19.1	60.3	100.0	686
Rural	16.2	27.0	30.9	25.9	100.0	2,534
<b>Total</b>	13.2	27.7	31.1	28.0	100.0	28,810

Table 2.11.2 shows that more than 70 percent of women in DI Yogyakarta, Bali, and Bengkulu worked in the 12 months preceding the survey. In contrast, low proportions (less than 40 percent) of working women are found in West Java, North Sulawesi, South Sulawesi, East Timor, and Maluku.

## 2.12 Occupation

Table 2.12.1 presents the percent distribution of women who worked in the 12 months prior to the survey by occupation, according to selected background characteristics. Forty-four percent of the women worked in agriculture, among whom seven in ten worked on their own land. The table also shows that for women who work outside the agricultural sector, sales is a popular choice of employment (25 percent), followed by manufacturing industries (17 percent), services (6 percent), and professional and technical occupations (5 percent).

Women's occupations vary by age. The proportion of women who worked in agriculture is highest for those in the youngest and oldest age groups. The proportion declines from 53 percent of working women age 15-19 to 41 percent of women age 30-39, and it increases to 55 percent for women age 45-49. On the other hand, the proportion of women working as professional and technical workers, has an opposite pattern: low at younger ages, peaking at age 30-34, and then declining for older women. Manufacturing industries attract younger women.



Table 2.9.2 Level of education: region and province

Percent distribution of ever-married women by the highest level of education attended, according to region and province, Indonesia 1997

Region and province	Highest level of education attended				Total	Number of women
	No education	Some primary	Completed primary	Some secondary +		
<b>Java-Bali</b>	13.8	27.9	33.7	24.6	100.0	18,039
DKI Jakarta	3.8	13.9	28.0	54.3	100.0	1,152
West Java	12.2	29.9	37.6	20.3	100.0	5,691
Central Java	14.8	28.5	33.9	22.8	100.0	4,634
DI Yogyakarta	10.2	20.7	23.9	45.3	100.0	439
East Java	16.3	29.4	31.9	22.4	100.0	5,681
Bali	21.0	21.5	29.1	28.4	100.0	442
<b>Outer Java-Bali I</b>	11.8	28.2	26.0	34.2	100.0	7,550
Dista Aceh	13.7	22.2	29.4	34.7	100.0	570
North Sumatra	6.2	24.6	28.4	40.9	100.0	1,687
West Sumatra	3.2	29.7	21.5	45.8	100.0	543
South Sumatra	9.6	27.6	30.0	32.8	100.0	942
Lampung	7.9	39.0	27.9	25.2	100.0	913
West Nusa Tenggara	33.4	26.9	18.2	21.6	100.0	595
West Kalimantan	24.8	32.0	15.7	27.5	100.0	479
South Kalimantan	8.5	30.9	27.2	33.4	100.0	433
North Sulawesi	1.4	26.9	20.4	51.4	100.0	340
South Sulawesi	16.2	25.2	27.5	31.1	100.0	1,049
<b>Outer Java-Bali II</b>	13.5	24.9	28.4	33.2	100.0	3,221
Riau	13.9	30.7	23.4	32.0	100.0	477
Jambi	17.9	20.1	35.3	26.7	100.0	416
Bengkulu	10.1	36.1	19.9	33.9	100.0	192
East Nusa Tenggara	15.6	23.4	37.8	23.3	100.0	489
East Timor	53.9	16.7	8.7	20.7	100.0	120
Central Kalimantan	7.7	27.3	34.1	30.9	100.0	238
East Kalimantan	6.4	27.2	21.5	44.9	100.0	363
Central Sulawesi	3.9	21.4	37.6	37.1	100.0	270
Southeast Sulawesi	9.5	23.6	25.5	41.6	100.0	178
Maluku	4.4	22.7	27.8	45.1	100.0	235
Irian Jaya	22.4	21.4	20.0	36.4	100.0	242
<b>Total</b>	13.2	27.7	31.1	28.0	100.0	28,810

Table 2.12.1 shows that women's occupations vary significantly by urban-rural residence and education. While 57 percent of working women in rural areas are engaged in the agricultural sector, the corresponding proportion in urban areas is 5 percent. In contrast, urban women are more likely to work in sales (43 percent), manufacturing industries (18 percent), services (15 percent), and professional and technical jobs (9 percent). The urban-rural differentials in all regions are similar to those at the national level.

Women's education is inversely related to their propensity to work in agriculture; employed women with no education are much more likely to be working in agriculture than better educated women. For example, 65 percent of working women with no education worked in agriculture, compared with only 16 percent of women who have attended secondary school. In contrast, women who are better educated are more likely to be employed in sales, industrial, professional and technical, and clerical occupations.



**Table 2.10.1 Access to mass media: background characteristics**

Percentage of women who usually read a newspaper once a week, watch television once a week, or listen to the radio daily, by selected background characteristics, Indonesia 1997

Background characteristic	No mass media	Mass media				Number of women
		Read newspaper weekly	Watch television weekly	Listen to radio daily	All three media	
<b>Age</b>						
15-19	12.6	24.7	77.4	57.1	17.3	1,310
20-24	12.0	26.9	79.8	55.1	17.3	4,061
25-29	12.8	31.2	79.9	52.4	18.5	5,463
30-34	13.4	26.7	80.2	48.8	16.4	5,375
35-39	15.3	22.3	78.2	46.5	14.2	5,198
40-44	16.5	22.3	75.5	47.5	14.0	4,003
45-49	20.9	17.6	71.5	42.7	10.3	3,399
<b>Residence</b>						
Urban	5.0	45.4	91.9	50.1	26.4	8,033
Rural	18.4	17.2	72.5	49.2	11.4	20,777
<b>Region/Residence</b>						
Java-Bali	12.4	25.1	81.1	49.6	15.6	18,039
Urban	5.1	44.4	91.6	50.0	25.6	5,722
Rural	15.7	16.2	76.3	49.5	11.0	12,317
Outer Java-Bali I	16.8	23.2	74.7	50.1	14.5	7,550
Urban	5.2	45.3	93.0	49.9	26.8	1,625
Rural	19.9	17.0	69.8	50.1	11.2	5,925
Outer Java-Bali II	22.8	29.1	67.3	46.9	17.6	3,221
Urban	4.2	54.2	92.7	51.8	32.1	686
Rural	27.8	22.3	60.4	45.6	13.6	2,534
<b>Education</b>						
No education	33.6	0.3	57.5	33.9	0.3	3,807
Some primary	19.6	8.7	71.7	44.3	5.6	7,955
Primary completed	12.2	21.0	79.6	53.6	13.7	8,958
Some secondary +	3.6	57.2	91.8	57.3	34.5	8,090
<b>Total</b>	<b>14.7</b>	<b>25.0</b>	<b>77.9</b>	<b>49.4</b>	<b>15.5</b>	<b>28,810</b>

Table 2.12.2 shows differences among provinces in respondents' patterns of work. In DKI Jakarta, virtually all women who work are employed in the nonagricultural sector. In this province, two in five working women work in sales, 23 percent in services, 16 percent in industry, and 13 percent in clerical jobs. Relatively large proportions of women work in industrial occupations in most provinces in Java-Bali, while professional and technical professions are more popular in North Sulawesi than in other provinces. Three-quarters or more of working women in West Kalimantan, Jambi, and East Nusa Tenggara work in agriculture.

## 2.13 Decisions on Use of Earnings

When assessing the status of women, one valuable indicator is their independence in making decisions on the use of their earnings. Table 2.13.1 shows that more than half (51 percent) of employed women make their own decisions on the use of their earnings, while 44 percent decide together with their husband, and 5 percent are not involved in making the decisions. Independent decision making on use of earnings tends to be higher among older women, women in urban areas, those living in the Java-Bali region, and among formerly married women.

Table 2.10.2 Access to mass media: region and province

Percentage of women who usually read a newspaper once a week, watch television once a week, or listen to the radio daily, by region and province, Indonesia 1997

Region and province	Mass media					Number of women
	No mass media	Read newspaper weekly	Watch television weekly	Listen to radio daily	All three media	
<b>Java-Bali</b>	12.4	25.1	81.1	49.6	15.6	18,039
DKI Jakarta	1.5	55.0	96.9	40.6	26.7	1,152
West Java	11.4	28.2	81.9	51.7	18.0	5,691
Central Java	15.3	19.2	76.5	50.8	12.7	4,634
DI Yogyakarta	5.7	41.9	89.5	62.8	30.5	439
East Java	14.1	19.7	79.6	45.8	11.8	5,681
Bali	7.4	20.8	88.6	71.4	18.9	442
<b>Outer Java-Bali I</b>	16.8	23.2	74.7	50.1	14.5	7,550
Dista Aceh	31.8	16.9	59.7	43.9	12.1	570
North Sumatra	24.9	20.0	69.4	37.4	10.4	1,687
West Sumatra	12.3	29.0	78.4	39.6	12.6	543
South Sumatra	6.9	28.6	88.1	53.7	17.2	942
Lampung	12.3	18.2	72.9	70.0	14.0	913
West Nusa Tenggara	13.1	15.8	76.6	59.0	11.3	595
West Kalimantan	10.3	24.1	85.3	37.0	12.2	479
South Kalimantan	9.4	27.2	86.9	49.4	19.4	433
North Sulawesi	6.7	45.3	87.2	60.2	31.8	340
South Sulawesi	21.7	23.1	64.6	56.1	17.4	1,049
<b>Outer Java-Bali II</b>	22.8	29.1	67.3	46.9	17.6	3,221
Riau	11.5	30.6	82.7	45.7	16.9	477
Jambi	10.0	24.5	73.1	70.1	19.3	416
Bengkulu	9.0	25.1	85.6	54.7	17.1	192
East Nusa Tenggara	57.9	24.6	24.1	28.9	11.1	489
East Timor	55.3	20.3	30.0	31.1	9.6	120
Central Kalimantan	10.1	30.3	81.4	63.3	23.8	238
East Kalimantan	3.0	50.3	93.5	46.5	26.8	363
Central Sulawesi	18.0	23.3	77.1	39.7	13.6	270
Southeast Sulawesi	17.1	21.4	73.5	52.8	14.9	178
Maluku	27.0	30.0	63.8	37.5	16.9	235
Irian Jaya	37.3	28.6	54.2	45.4	20.5	242
<b>Total</b>	14.7	25.0	77.9	49.4	15.5	28,810

Table 2.13.2 shows that the percent distribution of employed women, according to who decides on use of their earnings, varies significantly by province. The percentage of women who make their own decisions on the use of their earnings varies from 15 percent in Bali to 72 percent in South Sulawesi. For women who make the decision together with their husbands, the percentage varies from a low of 23 percent (Southeast Sulawesi) to a high of 81 percent (Bali). One in five women in West Kalimantan and Irian Jaya and one in eight women in West Sumatra report that their husbands alone decide on how to spend their earnings; in the remaining provinces the percentages are below 10 percent.

Table 2.11.1 Employment: background characteristics

Percent distribution of women by employment status in the last 12 months, according to background characteristics, Indonesia 1997

Background characteristic	Did not work in last 12 months	Worked in last 12 months	Total	Number of women
<b>Age</b>				
15-19	72.1	27.9	100.0	1,310
20-24	66.2	33.8	100.0	4,061
25-29	57.3	42.7	100.0	5,463
30-34	49.4	50.6	100.0	5,375
35-39	42.1	57.9	100.0	5,198
40-44	39.2	60.8	100.0	4,003
45-49	38.5	61.5	100.0	3,399
<b>Residence</b>				
Urban	55.9	44.1	100.0	8,033
Rural	48.1	51.9	100.0	20,777
<b>Region/Residence</b>				
Java-Bali	52.5	47.5	100.0	18,039
Urban	54.3	45.7	100.0	5,722
Rural	51.6	48.4	100.0	12,317
Outer Java-Bali I	46.3	53.7	100.0	7,550
Urban	60.1	39.9	100.0	1,625
Rural	42.6	57.4	100.0	5,925
Outer Java-Bali II	47.1	52.9	100.0	3,221
Urban	58.8	41.2	100.0	686
Rural	43.9	56.1	100.0	2,534
<b>Education</b>				
No education	39.8	60.2	100.0	3,807
Some primary	45.1	54.9	100.0	7,955
Completed primary	55.8	44.2	100.0	8,958
Some secondary +	54.2	45.8	100.0	8,090
<b>Total</b>	<b>50.3</b>	<b>49.7</b>	<b>100.0</b>	<b>28,810</b>

## 2.14 Child Care While Working

The welfare of children under five years of age whose mothers are employed is the focus of Table 2.14.1. Overall, one in three women who worked in the 12 months prior to the survey have one or more children under age five. This proportion varies by residence, education, and occupation. Better educated women, and women who work occasionally are more likely to have children under five. As a reflection of regional fertility differentials, women in Java-Bali are less likely to have children under age five than women on the other islands.



Table 2.11.2 Employment: region and province

Percent distribution of women by employment status in the last 12 months, according to region and province, Indonesia 1997

Region and province	Did not work in last 12 months	Worked in last 12 months	Total	Number of women
<b>Java-Bali</b>	52.5	47.5	100.0	18,039
DKI Jakarta	55.2	44.8	100.0	1,152
West Java	69.8	30.2	100.0	5,691
Central Java	50.9	49.1	100.0	4,634
DI Yogyakarta	26.5	73.5	100.0	439
East Java	39.9	60.1	100.0	5,681
Bali	27.6	72.4	100.0	442
<b>Outer Java-Bali I</b>	46.3	53.7	100.0	7,550
Dista Aceh	52.4	47.6	100.0	570
North Sumatra	39.1	60.9	100.0	1,687
West Sumatra	42.3	57.7	100.0	543
South Sumatra	39.9	60.1	100.0	942
Lampung	54.8	45.2	100.0	913
West Nusa Tenggara	36.0	64.0	100.0	595
West Kalimantan	34.8	65.2	100.0	479
South Kalimantan	41.9	58.1	100.0	433
North Sulawesi	63.0	37.0	100.0	340
South Sulawesi	62.6	37.4	100.0	1,049
<b>Outer Java-Bali II</b>	47.1	52.9	100.0	3,221
Riau	47.9	52.1	100.0	477
Jambi	42.5	57.5	100.0	416
Bengkulu	28.7	71.3	100.0	192
East Nusa Tenggara	32.5	67.5	100.0	489
East Timor	67.7	32.3	100.0	120
Central Kalimantan	40.3	59.7	100.0	238
East Kalimantan	58.4	41.6	100.0	363
Central Sulawesi	53.6	46.4	100.0	270
Southeast Sulawesi	50.5	49.5	100.0	178
Maluku	64.2	35.8	100.0	235
Irian Jaya	51.0	49.0	100.0	242
<b>Total</b>	<b>50.3</b>	<b>49.7</b>	<b>100.0</b>	<b>28,810</b>

Among working women with young children, 41 percent take care of their children while they work. Relatives and older female siblings are the most common caretakers for children of working women (37 percent and 10 percent, respectively). The role of female siblings in child care is significant in families where the mother has limited education, works in agriculture, or works as a seasonal worker. Children whose mothers have attended secondary school, live in urban areas, are professionals, or work in clerical occupations, are more likely to be cared for by servants or hired help. Across all subgroups, husbands and male siblings have a very limited role in child minding while the mother is at work (3 and 2 percent, respectively).

**Table 2.12.1 Occupation: background characteristics**

Percent distribution of women employed in the 12 months before the survey by occupation and type of agricultural land worked or type of non-agricultural employment, according to selected background characteristics, Indonesia 1997

Background characteristic	Agricultural			Non-agricultural						Total	Number of women
	Own land	Rented land	Some-one else's land	Prof./tech.	Mgmt./admin.	Clerical	Sales	Serv-ices	Indus-trial		
<b>Age</b>											
15-19	33.7	1.7	17.4	0.1	0.0	0.1	16.7	3.9	26.3	100.0	366
20-24	28.5	1.8	11.8	1.6	0.0	2.2	22.0	6.3	25.6	100.0	1,375
25-29	27.9	2.2	11.5	5.4	0.6	4.7	23.9	5.8	18.0	100.0	2,334
30-34	27.1	1.3	12.4	7.4	0.3	4.2	23.6	5.9	17.6	100.0	2,722
35-39	28.5	0.8	11.7	6.4	0.2	2.8	27.9	6.0	15.7	100.0	3,012
40-44	30.3	1.3	14.3	4.7	0.3	2.6	26.3	6.9	13.3	100.0	2,433
45-49	37.3	2.3	14.9	3.9	0.2	0.8	23.9	5.5	11.1	100.0	2,087
<b>Residence</b>											
Urban	1.8	0.0	2.9	9.4	0.8	8.9	43.2	15.1	17.8	100.0	3,547
Rural	39.0	2.1	16.1	3.8	0.1	1.0	18.7	3.0	16.2	100.0	10,781
<b>Region/Residence</b>											
Java-Bali	21.0	1.1	14.0	4.2	0.3	2.8	27.0	7.4	22.0	100.0	8,573
Urban	1.7	0.0	3.2	8.2	0.9	7.5	41.8	16.0	20.7	100.0	2,614
Rural	29.4	1.6	18.8	2.5	0.1	0.7	20.6	3.7	22.6	100.0	5,959
Outer Java-Bali I	38.5	2.9	12.6	6.6	0.2	2.8	22.5	4.3	9.5	100.0	4,052
Urban	1.0	0.0	1.9	12.6	0.8	11.9	48.8	12.9	10.5	100.0	650
Rural	45.6	3.5	14.7	5.5	0.1	1.1	17.6	2.6	9.3	100.0	3,402
Outer Java-Bali II	53.7	0.4	7.5	6.4	0.3	4.0	18.4	3.2	6.1	100.0	1,703
Urban	4.3	0.0	3.0	14.0	0.8	15.1	43.0	12.6	7.2	100.0	283
Rural	63.5	0.5	8.4	4.9	0.3	1.8	13.5	1.3	5.9	100.0	1,420
<b>Education</b>											
No education	40.5	1.5	23.3	0.1	0.0	0.2	15.9	4.5	14.0	100.0	2,293
Some primary	35.7	2.0	17.5	0.1	0.0	0.0	23.2	5.5	16.0	100.0	4,369
Primary completed	33.7	1.8	11.2	0.2	0.0	0.4	26.9	5.8	19.9	100.0	3,951
Some secondary+	12.2	0.7	2.8	19.6	1.2	10.7	29.7	7.8	15.3	100.0	3,714
<b>Total</b>	29.9	1.6	12.9	5.2	0.3	2.9	24.7	6.0	16.6	100.0	14,328

The proportion of working mothers with children under five varies between a low of less than 30 percent in DKI Jakarta, DI Yogyakarta, East Java, and North Sulawesi, to 58 percent in East Timor (see Table 2.14.2). With some exceptions, mothers, relatives and female siblings are the most important care givers while the mother is working. Servants or hired help are popular in DKI Jakarta, where they care for almost one in five children under age five.

Table 2.12.2 Occupation: region and province

Percent distribution of women employed in the 12 months before the survey by occupation and type of agricultural land worked or type of non-agricultural employment, according to region and province, Indonesia 1997

Region and province	Agricultural			Non-agricultural						Total	Number of women
	Own land	Rented land	Some-one else's land	Prof./tech.	Mgmt./admin.	Clerical	Sales	Serv-ices	Indus-trial		
<b>Java-Bali</b>	21.0	1.1	14.0	4.2	0.3	2.8	27.0	7.4	22.0	100.0	8,573
DKI Jakarta	0.1	0.0	0.0	6.8	0.7	12.5	41.3	22.8	15.7	100.0	515
West Java	15.7	0.7	14.3	6.3	0.1	3.6	29.9	6.7	22.6	100.0	1,726
Central Java	30.6	3.0	13.1	3.6	0.3	1.1	26.8	5.5	16.0	100.0	2,273
DI Yogyakarta	23.1	0.7	5.8	7.3	0.3	3.6	27.6	6.2	25.1	100.0	322
East Java	19.8	0.4	17.4	2.8	0.4	1.8	23.5	7.0	26.9	100.0	3,416
Bali	26.2	0.1	14.3	5.1	0.6	4.1	27.5	5.7	16.3	100.0	320
<b>Outer Java-Bali I</b>	38.5	2.9	12.6	6.6	0.2	2.8	22.5	4.3	9.5	100.0	4,052
Dista Aceh	50.3	2.4	12.7	10.5	0.0	1.9	12.1	2.2	7.9	100.0	271
North Sumatra	33.7	6.8	8.8	6.7	0.3	3.7	19.9	6.0	14.1	100.0	1,025
West Sumatra	29.2	3.6	18.0	11.1	0.4	2.9	21.2	2.7	11.0	100.0	314
South Sumatra	43.7	2.0	13.7	6.3	0.3	3.6	20.5	4.3	5.5	100.0	563
Lampung	42.7	0.1	11.8	5.5	0.2	1.3	25.7	4.3	8.6	100.0	413
West Nusa Tenggara	26.4	1.5	21.4	2.1	0.2	1.6	33.8	2.3	10.6	100.0	381
West Kalimantan	59.0	2.3	16.2	3.8	0.0	2.3	9.9	3.4	3.1	100.0	312
South Kalimantan	36.3	1.7	10.1	6.2	0.3	3.2	30.2	4.1	7.7	100.0	252
North Sulawesi	21.9	0.0	5.8	18.6	0.2	2.9	30.5	7.4	12.3	100.0	126
South Sulawesi	39.5	0.4	9.2	6.0	0.2	3.2	29.3	4.2	8.0	100.0	391
<b>Outer Java-Bali II</b>	53.7	0.4	7.5	6.4	0.3	4.0	18.4	3.2	6.1	100.0	1,703
Riau	33.6	0.5	18.7	4.3	0.3	3.7	27.0	4.8	6.9	100.0	248
Jambi	68.8	0.8	6.6	4.6	0.2	3.0	10.8	2.3	2.9	100.0	239
Bengkulu	56.0	0.9	11.6	5.7	0.0	2.6	17.6	3.3	2.5	100.0	137
East Nusa Tenggara	69.4	0.0	5.4	4.1	0.1	1.7	9.4	0.5	9.4	100.0	330
East Timor	65.4	0.0	0.5	7.9	0.0	7.2	8.3	1.0	9.6	100.0	39
Central Kalimantan	53.2	0.8	6.4	7.0	0.0	1.8	23.7	1.2	5.8	100.0	142
East Kalimantan	25.4	0.0	4.8	12.8	1.0	5.9	32.8	9.5	7.9	100.0	151
Central Sulawesi	49.5	0.9	5.2	10.5	0.5	4.9	22.2	3.7	2.7	100.0	125
Southeast Sulawesi	45.1	0.0	7.0	7.3	0.5	3.9	25.0	2.4	8.8	100.0	88
Maluku	44.2	0.0	0.0	12.0	1.1	11.0	18.0	2.7	10.8	100.0	84
Irian Jaya	68.4	0.6	1.8	3.2	0.6	8.5	12.0	4.1	1.0	100.0	119
<b>Total</b>	29.9	1.6	12.9	5.2	0.3	2.9	24.7	6.0	16.6	100.0	14,328



**Table 2.13.1 Earnings: background characteristics**

Percent distribution of the women employed in the last 12 months by person who decides how earnings are used, according to selected background characteristics, Indonesia 1997

Background characteristic	Person who decides how earnings are used					Total	Number
	Respondent	Husband	Jointly with husband	Someone else	Jointly with someone		
<b>Age</b>							
15-19	44.5	6.5	44.5	4.3	0.3	100.0	366
20-24	47.8	5.9	45.1	0.1	1.0	100.0	1,375
25-29	48.4	5.5	45.6	0.3	0.2	100.0	2,334
30-34	48.0	4.7	46.6	0.4	0.4	100.0	2,722
35-39	51.5	4.1	43.9	0.2	0.4	100.0	3,012
40-44	51.4	5.1	43.0	0.1	0.4	100.0	2,433
45-49	57.3	4.6	37.5	0.0	0.5	100.0	2,087
<b>Residence</b>							
Urban	56.1	3.0	40.3	0.2	0.4	100.0	3,547
Rural	48.8	5.6	44.8	0.3	0.5	100.0	10,781
<b>Region/Residence</b>							
Java-Bali	54.7	3.6	40.7	0.4	0.6	100.0	8,573
Urban	58.4	2.7	38.3	0.3	0.4	100.0	2,614
Rural	53.2	4.1	41.8	0.4	0.6	100.0	5,959
Outer Java-Bali I	44.8	7.6	47.3	0.1	0.2	100.0	4,052
Urban	49.4	4.3	46.2	0.0	0.1	100.0	650
Rural	44.0	8.2	47.6	0.1	0.2	100.0	3,402
Outer Java-Bali II	43.8	5.0	50.4	0.3	0.5	100.0	1,703
Urban	50.8	2.3	46.2	0.4	0.3	100.0	283
Rural	42.4	5.6	51.2	0.3	0.5	100.0	1,420
<b>Education</b>							
No education	49.9	6.3	43.1	0.0	0.6	100.0	2,293
Some primary	53.2	4.8	41.5	0.2	0.4	100.0	4,369
Primary completed	50.0	5.7	43.4	0.5	0.5	100.0	3,951
Some secondary +	48.8	3.4	47.2	0.4	0.3	100.0	3,714
<b>Current marital status</b>							
Not married	95.5	0.0	0.6	0.6	3.2	100.0	1,411
Currently married	45.7	5.4	48.4	0.3	0.1	100.0	12,919
<b>Total</b>	50.6	4.9	43.7	0.3	0.4	100.0	14,328

Table 2.13.2 Earnings: region and province

Percent distribution of the women employed in the last 12 months by person who decides how earnings are used, according to region and province, Indonesia 1997

Region and province	Person who decides how earnings are used					Total	Number
	Respondent	Husband	Jointly with husband	Someone else	Jointly with someone		
<b>Java-Bali</b>	54.7	3.6	40.7	0.4	0.6	100.0	8,573
DKI Jakarta	63.6	2.2	33.7	0.2	0.3	100.0	515
West Java	61.5	4.2	33.7	0.2	0.5	100.0	1,726
Central Java	63.7	4.7	31.3	0.3	0.0	100.0	2,273
DI Yogyakarta	50.8	3.5	43.7	0.3	1.7	100.0	322
East Java	48.2	2.9	47.4	0.6	0.9	100.0	3,416
Bali	14.7	3.6	81.4	0.0	0.2	100.0	320
<b>Outer Java-Bali I</b>	44.8	7.6	47.3	0.1	0.2	100.0	4,052
Dista Aceh	26.2	7.6	66.0	0.0	0.2	100.0	271
North Sumatra	35.8	8.4	56.0	0.0	0.0	100.0	1,025
West Sumatra	32.8	13.4	53.6	0.0	0.4	100.0	314
South Sumatra	29.9	8.9	60.8	0.1	0.2	100.0	563
Lampung	70.9	4.8	24.1	0.3	0.0	100.0	413
West Nusa Tenggara	61.7	2.4	35.8	0.0	0.1	100.0	381
West Kalimantan	44.6	20.6	34.4	0.3	0.1	100.0	312
South Kalimantan	46.1	2.6	50.5	0.7	0.2	100.0	252
North Sulawesi	34.3	2.1	63.6	0.0	0.0	100.0	126
South Sulawesi	71.5	1.4	26.6	0.0	0.4	100.0	391
<b>Outer Java-Bali II</b>	43.8	5.0	50.4	0.3	0.5	100.0	1,703
Riau	39.7	5.4	53.7	0.3	1.0	100.0	248
Jambi	39.7	5.6	54.2	0.5	0.0	100.0	239
Bengkulu	28.7	2.6	68.5	0.1	0.0	100.0	137
East Nusa Tenggara	56.4	2.2	39.8	0.3	1.3	100.0	330
East Timor	33.3	0.3	66.4	0.0	0.0	100.0	39
Central Kalimantan	32.5	2.4	63.4	1.0	0.5	100.0	142
East Kalimantan	52.4	3.7	43.5	0.2	0.3	100.0	151
Central Sulawesi	43.4	4.3	52.3	0.0	0.0	100.0	125
Southeast Sulawesi	68.3	8.4	22.8	0.5	0.0	100.0	88
Maluku	50.8	1.4	47.9	0.0	0.0	100.0	84
Irian Jaya	26.5	21.0	52.0	0.0	0.3	100.0	119
<b>Total</b>	50.6	4.9	43.7	0.3	0.4	100.0	14,328

Table 2.14.1 Child care while working: background characteristics

Percent distribution of employed women by whether they have a child under five years of age and percent distribution of employed mothers who have a child under five by person who cares for child while mother is at work, according to background characteristics, Indonesia 1997

Background characteristic	Employed women		Child's caretaker, among employed mothers who have children <5 years													Number of women
	No child <5	One or more children <5	Respondent	Husband	Other relative	Neighbor	Friend	Hired help	Child is in school	Institutional care	Other female child	Other male child	Not worked since birth	Other	Total	
<b>Residence</b>																
Urban	66.2	33.8	36.1	3.4	38.4	1.3	0.0	10.3	0.9	0.3	6.5	0.8	1.9	0.1	100.0	3,547
Rural	65.3	34.7	42.7	2.9	36.2	1.9	0.3	0.8	0.9	0.2	10.5	2.5	0.8	0.3	100.0	10,781
<b>Region/Residence</b>																
Java-Bali	70.0	30.0	40.1	2.9	39.5	1.6	0.3	4.4	0.8	0.0	7.9	1.3	1.0	0.2	100.0	8,573
Urban	67.3	32.7	35.5	3.1	38.2	0.9	0.0	11.6	1.0	0.1	6.6	0.6	2.4	0.0	100.0	2,614
Rural	71.2	28.8	42.4	2.8	40.2	1.9	0.4	0.8	0.7	0.0	8.6	1.6	0.4	0.2	100.0	5,959
Outer Java-Bali I	59.2	40.8	41.1	2.9	33.6	2.0	0.1	1.6	1.1	0.6	12.0	3.3	1.1	0.3	100.0	4,052
Urban	64.1	35.9	38.2	4.3	38.2	1.9	0.0	7.6	0.7	0.8	5.7	1.7	0.6	0.3	100.0	650
Rural	58.3	41.7	41.6	2.7	32.8	2.0	0.2	0.7	1.1	0.6	13.1	3.6	1.2	0.3	100.0	3,402
Outer Java-Bali II	57.7	42.3	44.8	3.6	33.6	2.1	0.1	1.6	1.1	0.1	9.4	2.3	1.1	0.3	100.0	1,703
Urban	61.0	39.0	36.3	3.6	40.3	3.1	0.0	5.7	1.0	0.7	7.5	0.6	0.7	0.4	100.0	283
Rural	57.0	43.0	46.4	3.6	32.4	1.9	0.1	0.8	1.1	0.0	9.7	2.5	1.1	0.2	100.0	1,420
<b>Education</b>																
No education	77.9	22.1	38.8	5.1	28.3	2.1	0.0	0.1	1.4	0.0	17.4	6.4	0.2	0.2	100.0	2,293
Some primary	71.1	28.9	40.4	3.1	32.9	1.9	0.2	0.1	1.7	0.1	15.5	2.6	1.2	0.4	100.0	4,369
Completed primary	62.9	37.1	46.3	2.2	38.1	1.4	0.5	0.6	0.5	0.1	7.2	1.8	1.1	0.1	100.0	3,951
Some secondary +	53.9	46.1	37.8	3.0	40.8	1.9	0.0	8.2	0.6	0.5	4.8	0.6	1.2	0.3	100.0	3,714
<b>Respondent's occupation</b>																
Professional/technical	56.7	43.3	10.1	8.2	54.3	5.5	0.0	13.9	1.8	0.5	4.6	0.1	0.6	0.4	100.0	745
Managerial/admin.	54.2	45.8	1.8	0.0	77.2	11.5	0.0	5.7	0.0	2.6	1.3	0.0	0.0	0.0	100.0	43
Clerical	50.4	49.6	4.4	2.9	56.1	4.1	0.0	21.1	0.0	1.6	6.9	0.6	2.3	0.0	100.0	422
Sales	65.9	34.1	63.1	3.7	21.1	0.7	0.0	3.8	0.5	0.0	5.3	0.4	1.1	0.2	100.0	3,548
Service	71.4	28.6	39.1	5.0	39.9	0.3	0.0	4.2	0.2	1.4	7.2	2.2	0.4	0.1	100.0	862
Agricultural	66.9	33.1	31.0	2.3	41.8	2.1	0.3	0.1	1.5	0.1	15.5	3.8	1.2	0.4	100.0	6,327
Industrial	64.7	35.3	57.7	1.2	33.1	0.5	0.4	0.4	0.4	0.1	3.9	1.5	0.7	0.0	100.0	2,374
Other	29.1	70.9	12.9	0.0	0.0	87.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	4
<b>Employment year round/seasonal</b>																
All year	64.8	35.2	42.1	2.9	36.1	1.8	0.3	3.8	0.9	0.3	8.6	2.0	1.0	0.2	100.0	10,998
Seasonal	69.7	30.3	36.1	3.2	38.7	1.7	0.1	0.0	0.9	0.0	14.5	2.9	1.4	0.4	100.0	2,731
Occasional	59.7	40.3	43.5	3.7	38.8	1.9	0.0	1.5	1.9	0.0	6.5	0.6	1.4	0.0	100.0	598
<b>Total</b>	<b>65.5</b>	<b>34.5</b>	<b>41.2</b>	<b>3.0</b>	<b>36.7</b>	<b>1.8</b>	<b>0.2</b>	<b>3.0</b>	<b>0.9</b>	<b>0.2</b>	<b>9.5</b>	<b>2.1</b>	<b>1.1</b>	<b>0.2</b>	<b>100.0</b>	<b>14,328</b>

Note: Totals include 5 women with missing information on occupation.



Table 2.14.2 Child care while working: region and province

Percent distribution of employed women by whether they have a child under five years of age and percent distribution of employed mothers who have a child under five by person who cares for child while mother is at work, according to region and province, Indonesia 1997

Region and province	Employed women		Child's caretaker, among employed mothers who have children <5 years													Number of women
	No child <5	One or more children <5	Respondent	Husband	Other relative	Neighbor	Friend	Hired help	Child is in school	Institutional care	Other female child	Other male child	Not worked since birth			
													Other	Total		
<b>Java-Bali</b>	70.0	30.0	40.1	2.9	39.5	1.6	0.3	4.4	0.8	0.0	7.9	1.3	1.0	0.2	100.0	8,573
DKI Jakarta	71.3	28.7	35.8	0.4	34.8	0.0	0.0	18.8	0.4	0.0	3.3	1.2	5.2	0.0	100.0	515
West Java	65.2	34.8	45.6	1.8	30.2	0.6	0.0	4.0	1.8	0.0	11.0	2.7	1.7	0.5	100.0	1,726
Central Java	67.8	32.2	39.6	3.0	40.8	2.5	0.0	2.8	0.0	0.0	10.1	0.0	1.2	0.0	100.0	2,273
DI Yogyakarta	70.5	29.5	37.8	5.0	40.4	1.6	0.0	6.0	1.0	0.4	4.5	2.1	0.4	0.8	100.0	322
East Java	73.8	26.2	37.2	3.5	46.1	1.6	0.8	3.3	0.9	0.0	5.4	1.3	0.0	0.0	100.0	3,416
Bali	68.9	31.1	45.8	4.5	33.7	2.1	0.0	4.9	0.0	0.3	6.4	1.3	0.2	0.7	100.0	320
<b>Outer Java-Bali I</b>	59.2	40.8	41.1	2.9	33.6	2.0	0.1	1.6	1.1	0.6	12.0	3.3	1.1	0.3	100.0	4,052
Dista Aceh	59.9	40.1	41.7	0.5	38.8	1.4	0.5	2.8	0.0	0.0	13.5	0.4	0.5	0.0	100.0	271
North Sumatra	52.5	47.5	41.7	3.3	31.7	2.1	0.0	1.6	1.2	1.1	13.7	2.7	0.2	0.5	100.0	1,025
West Sumatra	61.1	38.9	43.9	3.2	35.3	1.9	0.0	2.2	1.3	0.3	6.9	3.2	1.8	0.0	100.0	314
South Sumatra	64.5	35.5	41.7	3.2	29.9	1.1	0.0	2.2	2.4	0.0	12.6	3.2	3.2	0.0	100.0	563
Lampung	57.8	42.2	45.7	1.9	36.7	2.0	0.0	0.0	0.0	0.3	9.5	1.5	1.6	0.2	100.0	413
West Nusa Tenggara	58.2	41.8	40.7	2.4	36.6	0.7	1.1	1.1	0.0	0.0	12.3	2.6	1.7	0.8	100.0	381
West Kalimantan	56.1	43.9	30.6	3.5	33.3	1.8	0.0	2.8	3.5	2.0	14.9	6.3	0.3	1.0	100.0	312
South Kalimantan	69.6	30.4	40.2	3.6	30.9	2.7	0.0	2.1	1.0	1.3	10.7	4.7	2.7	0.0	100.0	252
North Sulawesi	70.0	30.0	48.2	5.8	32.3	2.2	0.0	3.0	0.0	0.0	8.5	0.0	0.0	0.0	100.0	126
South Sulawesi	62.1	37.9	39.1	3.5	34.6	4.1	0.0	0.7	0.0	0.0	10.5	7.6	0.0	0.0	100.0	391
<b>Outer Java-Bali II</b>	57.7	42.3	44.8	3.6	33.6	2.1	0.1	1.6	1.1	0.1	9.4	2.3	1.1	0.3	100.0	1,703
Riau	56.7	43.3	40.6	4.1	31.4	0.7	0.5	2.9	4.4	0.0	11.8	1.9	1.2	0.6	100.0	248
Jambi	62.5	37.5	45.5	2.4	34.6	0.8	0.0	2.5	0.0	0.3	9.6	4.1	0.4	0.0	100.0	239
Bengkulu	63.7	36.3	58.9	2.8	23.1	2.2	0.0	2.9	2.1	0.0	4.2	1.3	2.5	0.0	100.0	137
East Nusa Tenggara	51.0	49.0	46.7	2.9	35.9	2.5	0.0	0.5	0.0	0.0	7.8	2.0	1.4	0.3	100.0	330
East Timor	41.8	58.2	27.8	2.6	36.1	3.3	0.0	1.7	0.5	0.0	19.2	6.2	2.4	0.0	100.0	39
Central Kalimantan	58.5	41.5	50.1	3.1	29.6	3.2	0.0	0.9	0.7	0.0	7.6	3.3	1.4	0.0	100.0	142
East Kalimantan	62.4	37.6	42.0	3.3	35.9	4.1	0.0	1.5	0.9	0.9	9.4	1.0	1.0	0.0	100.0	151
Central Sulawesi	60.3	39.7	43.7	3.6	39.5	1.8	0.0	0.9	0.0	0.0	6.9	2.4	0.6	0.5	100.0	125
Southeast Sulawesi	64.0	36.0	45.3	2.0	30.9	3.0	0.0	1.5	0.0	0.8	13.0	2.1	0.7	0.7	100.0	88
Maluku	56.6	43.4	28.0	0.8	52.2	1.4	0.0	1.5	0.7	0.0	12.4	2.2	0.0	0.8	100.0	84
Irian Jaya	53.7	46.3	50.8	11.5	23.1	2.4	0.0	1.0	1.3	0.0	9.2	0.7	0.0	0.0	100.0	119
<b>Total</b>	65.5	34.5	41.2	3.0	36.7	1.8	0.2	3.0	0.9	0.2	9.5	2.1	1.1	0.2	100.0	14,328

## CHAPTER 3

### FERTILITY

A major objective of the 1997 IDHS is to estimate fertility levels, trends and differentials. As with the 1991 and 1994 IDHS; detailed information on current, cumulative and past levels of fertility was collected in the 1997 IDHS from ever-married women. The fertility information was collected using two procedures. First, each woman was asked a series of questions about the number of live births she had ever had and the number of children surviving. Experience has indicated that certain types of events are underreported. To minimize error, children were identified by sex, whether they lived with their mother or elsewhere, and by whether they were living or dead. Identification by sex improves reporting and allows estimation of sex-specific mortality rates.

Second, a full birth history was obtained from each woman, and for each live birth the following information was collected: name, sex, month and year of birth, whether the birth was single or multiple, and the survival status of the child. For living children, the woman was asked whether the child was living in the household or away. For dead children, the age at death was recorded. To reduce underreporting of births when the interval between births was 4 years or longer, interviewers were required to check whether the respondent had had a child during the interval. Information on whether currently married women were pregnant was also solicited.

From population censuses and surveys in Indonesia, fertility and mortality rates have been estimated using indirect methods, based on information on the number of children ever born and children surviving. The fertility measures presented here are calculated directly from the birth history. In applying a direct fertility estimation procedure, it is important to note that although the birth history offers a richer set of data for analysis, there are some limitations. Because interviews were conducted only with living women, there was no information on the fertility of women who had died. The fertility rates would be biased if the mortality of women of childbearing age were high and if there were significant differences in fertility between living and dead women. In Indonesia, neither of these appears to be the case. Also, the 1997 IDHS collected birth histories only from ever-married women. Since most births in Indonesia occur within marriage, the number of births to single women is negligible.

The accuracy of fertility data is affected primarily by underreporting of births (especially children who died in early infancy) and misreporting of date of birth. Errors in underreporting of births affect the estimates of fertility levels, while misreporting of dates of births can distort estimates of fertility trends. If these errors vary by socioeconomic characteristics of the women, the differentials in fertility will also be affected.

#### 3.1 Fertility Level and Trends

Table 3.1 and Figure 3.1 present the total fertility rates (TFR) and the age-specific fertility rates (ASFR)<sup>1</sup> derived from the 1997 IDHS, along with results from previous data sources. The TFR is calculated

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<sup>1</sup>Numerators of the age-specific fertility rates are calculated by summing the number of live births that occurred in the period 1-36 months preceding the survey (determined by the date of interview and the date of birth of the child), and classifying them by the age (in 5-year groups) of the mother at the time of birth (determined by the mother's date of birth). The denominators of the rates are the number of woman-years lived in each of the specified 5-year groups during the 1 to 36 months preceding the survey. Since only women who had ever married were interviewed in the IDHS, the numbers of women in the denominators of the rates were inflated by factors calculated from information in the household questionnaire on proportions ever married in order to produce a count of all women. Never-married women are presumed not have given birth.

Table 3.1 Fertility rates from various sources

Age-specific and cumulative fertility rates from selected sources, Indonesia 1971-1994

Age group	1971 Census (1967-70)	1976 SUPAS (1971-75)	1980 Census (1976-79)	1985 SUPAS (1980-85)	1987 NICPS <sup>1</sup> (1984-87) <sup>2</sup>	1990 Census (1986-89)	1991 1991 (1988-91) <sup>2</sup>	1994 IDHS (1991-94)	1997 IDHS (1995-1997) <sup>2</sup>		
									Urban	Rural	Total
15-19	155	127	116	95	78	71	67	61	32	79	62
20-24	286	265	248	220	188	178	162	147	112	158	143
25-29	273	256	232	206	172	172	157	150	143	152	149
30-34	211	199	177	154	126	128	117	109	113	105	108
35-39	124	118	104	89	75	73	73	68	62	67	66
40-44	55	57	46	37	29	31	23	31	17	27	24
45-49	17	18	13	10	10	9	7	4	1	7	6
TFR 15-49	5.61	5.20	4.68	4.06	3.39	3.31	3.02	2.85	2.40	2.98	2.78
TFR 15-44	5.52	5.11	4.62	4.01	3.34	3.27	2.99	2.83	2.39	2.94	2.76
GFR	-	-	-	-	-	-	108	101	83.0	104.0	97.0
CBR	-	-	-	-	-	-	25.1	23.3	22.0	23.6	23.1

Note: Estimates for 1971 through 1985 and for 1990 were computed using the *own children* method, while the 1987 NICPS, 1991 IDHS and 1994 IDHS rates were calculated directly from birth history data.

TFR: Total fertility rate expressed per woman

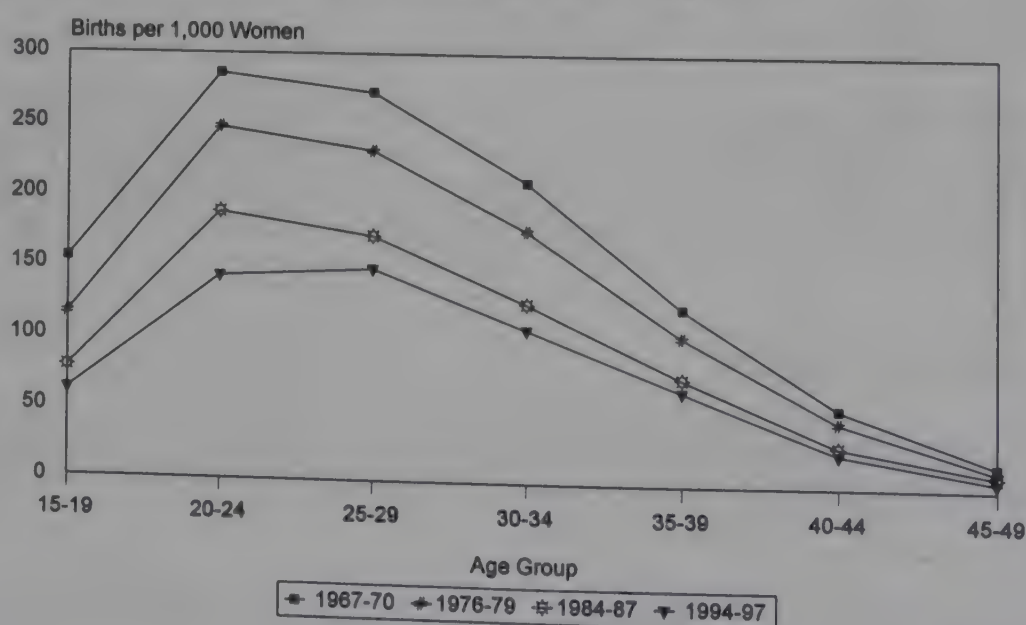
GFR: General fertility rate (births divided by number of women 15-44), expressed per 1,000 women

CBR: Crude birth rate expressed per 1,000 population

<sup>1</sup> Excludes 7 provinces in Outer Java-Bali II

<sup>2</sup> 1-36 months prior to survey

Figure 3.1  
Age-Specific Fertility Rates  
Indonesia, 1967-1997



IDHS97



by summing the age-specific fertility rate and can be interpreted as the average number of births a hypothetical woman would have at the end of her reproductive life if she were subject to the currently prevailing age-specific rates from 15 to 49. It is important to note that the rates are not strictly comparable because of differences in data collection procedures, geographic coverage, and estimation techniques. Nevertheless, they serve the purpose of reflecting recent fertility trends in Indonesia.

Table 3.1 shows that while the TFR continues to decline, the pace has slowed. The current level of fertility (2.8 births per woman) is half of what was reported for the 1967-1970 period (5.6 births per woman).

Results from the 1997 IDHS indicate that the age pattern of fertility by age group is the same as that in the 1994 IDHS; the peak (149 births per 1,000 women) is for women age 25-29. For urban residents, the age-specific fertility rate peaks at age 25-29, while for rural women the peak is at age 20-24. The 1997 IDHS data indicate that there is a gap in fertility between urban and rural residents. Urban women have, on average, 0.6 children fewer than rural women (2.4 compared with 3.0, respectively). The largest urban-rural difference is for women age 15-24.

Table 3.1 also presents the general fertility rate (GFR) and the crude birth rate (CBR) for the three years preceding the survey. The GFR is the number of live births per 1,000 women age 15-44. The CBR is the number of births per 1,000 population; it is calculated by summing the product of the age-specific fertility rates and the proportion of women in the specific age group out of the total number of persons who usually live in the selected households. The GFR is 97 and the CBR is 23.

Fertility trends can also be investigated using retrospective data from a single survey. Table 3.2 is generated from the birth history data collected in the 1997 IDHS. The numerators of these rates are classified by four-year segments of time preceding the survey and by mother's age at the time of birth in five-year intervals. Since women 50 years and over were not interviewed in the 1997 IDHS, the data in Table 3.2 is truncated. For example, rates cannot be calculated for women age 45-49 for part of the 4-7 years and all of the 8-11 years prior to the survey, because these women would have been 50 years or older at the time of the survey. The bottom diagonal of estimates is also partially truncated.

**Table 3.2 Age-specific fertility rates**

Age-specific fertility rates for four-year periods preceding the survey, by mother's age at the time of birth, Indonesia 1997

Maternal age at birth	Number of years preceding the survey				
	0-3	4-7	8-11	12-15	16-19
15-19	62	79	81	117	127
20-24	145	159	175	220	240
25-29	148	156	172	203	236
30-34	107	125	125	162	[196]
35-39	65	66	86	[112]	-
40-44	27	34	[69]	-	-
45-49	[5]	[22]	-	-	-

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated.

As shown in the table for all age groups, the decline is steepest between the periods 12-15 and 8-11 years before the survey. For most age groups, this is followed by a plateau or less steep decline between the periods 8-11 and 4-7 years ago, and then by a steeper decline between 4-7 and 0-3 years ago.

Table 3.3 presents trends in fertility by marital duration. This table shows the same pattern as in Table 3.2; for the same age group or marriage duration, recent fertility is lower than that in the distant past, and fertility has declined most rapidly in the period 12-15 to 8-11 years before the survey.

## 3.2 Fertility Differentials

Tables 3.4.1 and 3.4.2 present differentials in fertility by residence, region, level of education, and province using the TFR as the measure of current fertility. The first column of each table shows TFRs for the three years prior to the survey (1995 to 1997), the second column presents the percentage of women who are currently pregnant, and the third column presents the mean number of children ever born (CEB) to the oldest women (age 40-49). The mean number of CEB is an indicator of cumulative fertility; it reflects the fertility performance of older women who are nearing the end of their

reproductive period, and thus represents completed fertility. If fertility had remained stable over time, the two fertility measures, TFR and CEB, would be equal or similar.

**Table 3.3 Fertility by marital duration**

Fertility rates by duration (years) since first marriage for four-year periods preceding the survey, Indonesia 1997

Marital duration at birth	Number of years preceding the survey				
	0-3	4-7	8-11	12-15	16-19
0-4	271	282	282	317	313
5-9	153	170	184	222	269
10-14	113	125	145	184	210
15-19	75	96	107	146	[185]
20-24	47	54	[70]	[108]	a
25-29	18	[29]	a	a	a

Note: Duration-specific fertility rates are per 1,000 women. Estimates in brackets are truncated.

<sup>a</sup> Less than 125 woman-years of exposure

**Table 3.4.1 Fertility: background characteristics**

Total fertility rate for the three years preceding the survey, percentage of all women 15-49 currently pregnant, and mean number of children ever born (CEB) to women age 40-49, by selected background characteristics, Indonesia 1997

Background characteristic	Total fertility rate <sup>1</sup>	Percentage currently pregnant <sup>1</sup>	Mean number of CEB to women age 40-49
<b>Residence</b>			
Urban	2.40	4.29	3.97
Rural	2.98	4.44	4.48
<b>Region/Residence</b>			
Java-Bali	2.57	4.08	3.87
Urban	2.30	4.22	3.78
Rural	2.75	4.03	3.93
Outer Java-Bali I	3.10	4.77	5.06
Urban	2.62	4.16	4.39
Rural	3.26	4.97	5.29
Outer Java-Bali II	3.20	4.98	4.98
Urban	2.66	5.02	4.56
Rural	3.37	4.95	5.11
<b>Education</b>			
No education	2.66	2.89	4.27
Some primary	3.23	4.26	4.75
Completed primary	2.96	5.25	4.34
Some secondary+	2.55	4.24	3.59
<b>Total</b>	<b>2.78</b>	<b>4.38</b>	<b>4.32</b>

<sup>1</sup> All women age 15-49 years

Table 3.4.2 Fertility: region and province

Total fertility rate for the three years preceding the survey, percentage of all women 15-49 who are currently pregnant, and mean number of children ever born (CEB) to women age 40-49, by region and province, Indonesia 1997

Region and province	Total fertility rate <sup>1</sup>	Percentage currently pregnant <sup>1</sup>	Mean number of CEB to women age 40-49
<b>Java-Bali</b>	2.57	4.08	3.87
DKI Jakarta	2.04	3.74	4.15
West Java	(3.02)	5.19	4.56
Central Java	2.63	3.51	3.92
DI Yogyakarta	1.85	2.78	3.33
East Java	2.33	3.57	3.32
Bali	2.12	4.67	3.46
<b>Outer Java-Bali I</b>	3.10	4.77	5.07
DI Aceh	3.00	3.95	4.85
North Sumatra	3.72	5.72	5.44
West Sumatra	(3.40)	5.53	5.24
South Sumatra	2.64	3.70	5.10
Lampung	(2.91)	4.35	5.30
West Nusa Tenggara	(2.95)	5.42	5.81
West Kalimantan	(3.35)	4.30	5.16
South Kalimantan	(2.57)	4.26	4.63
North Sulawesi	(2.60)	4.64	3.69
South Sulawesi	2.88	4.68	4.51
<b>Outer Java-Bali II</b>	3.20	4.97	4.98
Riau	(3.42)	5.97	5.47
Jambi	(2.89)	4.06	4.80
Bengkulu	(2.97)	3.45	5.57
East Nusa Tenggara	(3.45)	5.23	5.04
East Timor	(4.43)	5.95	4.31
Central Kalimantan	(2.72)	4.16	4.50
East Kalimantan	(2.85)	4.12	4.98
Central Sulawesi	(3.04)	6.04	4.83
Southeast Sulawesi	(2.92)	4.42	5.20
Maluku	(3.31)	4.95	4.51
Irian Jaya	(3.38)	5.86	4.81
<b>Total</b>	<b>(2.78)</b>	<b>4.38</b>	<b>4.32</b>

Note: Rates in parentheses indicate that one or more of the component age-specific rates is based on fewer than 250 woman-years of exposure.

<sup>1</sup>Women age 15-49 years

In demographic studies of Indonesia, it is important to set the Java-Bali region apart from the rest of the country because of its distinct socioeconomic and political context. In addition to the availability of comparable data from the population censuses and past demographic surveys, family planning programs in this region were initiated earlier than in other regions in the country. Compared with other regions, Java-Bali consistently shows the lowest fertility. However, in recent years, fertility in Outer Java-Bali II has declined rapidly, narrowing the difference in fertility between this region and the rest of the country. At current levels, fertility in Java-Bali is 17 percent lower than in Outer Java-Bali I and 20 percent lower than in Outer Java-Bali II.



As in the 1994 IDHS, the 1997 IDHS findings show an inverted U-shape relationship between education and fertility, where the peak is for women who have some primary education.

Table 3.4.1 also shows that 4 percent of women are currently pregnant. This percentage varies by region, urban-rural residence, and educational attainment, but the differences are not large except by education. The last column of Table 3.4.1 shows that the mean number of CEB among women age 40-49 (4.3) is much higher than the TFR for the three years preceding the survey (2.8), suggesting a substantial reduction in fertility. The same pattern is shown by previous DHS surveys in Indonesia.

Table 3.4.2 shows provincial differentials in fertility. Among the six provinces in Java-Bali, two have reached a fertility level of 2 children or fewer per woman—DI Yogyakarta (1.85) and DKI Jakarta (2.04). The TFR is more than 3 children per woman in all provinces in Outer Java-Bali II except in Jambi, Bengkulu, Central Kalimantan, East Kalimantan, and Southeast Sulawesi.

### 3.3 Children Ever Born and Living

In the IDHS questionnaire, the total number of children ever born was ascertained by a sequence of questions designed to maximize recall. Since lifetime fertility reflects the accumulation of births over the past 30 years, it has limited direct relevance to the current situation. Nevertheless, the data are important in providing background information for understanding current fertility.

Table 3.5 presents the distribution of all women and of currently married women by the number of children ever born. The table also shows the average number of children ever born and the average number of children still living. Since the respondents in the 1997 IDHS are ever-married women, information on

Table 3.5 Children ever born and living

Percent distribution of all women and of currently married women age 15-49 by number of children ever born (CEB) and mean number ever born and living, according to five-year age groups, Indonesia 1997

Age group	Number of children ever born (CEB)											Total	Number of women	Mean no. of CEB	Mean no. of living children
	0	1	2	3	4	5	6	7	8	9	10+				
ALL WOMEN															
15-19	90.6	8.7	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	7,298	0.10	0.09
20-24	46.8	37.7	12.5	2.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	100.0	6,352	0.72	0.69
25-29	20.3	28.6	31.2	12.7	4.8	1.8	0.6	0.1	0.0	0.0	0.0	100.0	6,358	1.61	1.49
30-34	9.3	12.1	30.9	24.5	12.9	6.0	2.9	1.0	0.4	0.2	0.1	100.0	5,678	2.58	2.38
35-39	5.9	7.8	18.5	24.0	18.9	11.1	7.1	3.8	1.6	1.0	0.6	100.0	5,325	3.43	3.08
40-44	6.3	6.7	13.6	19.0	16.9	12.8	9.0	7.3	3.6	2.4	2.3	100.0	4,122	4.02	3.51
45-49	4.5	6.5	10.6	14.5	15.5	13.7	11.0	9.0	5.0	4.3	5.5	100.0	3,457	4.67	3.98
Total	31.4	16.7	16.8	12.8	8.5	5.3	3.4	2.3	1.1	0.8	0.8	100.0	38,590	2.11	1.88
CURRENTLY MARRIED WOMEN															
15-19	47.7	47.8	3.5	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,246	0.58	0.52
20-24	16.5	58.7	20.0	4.2	0.6	0.1	0.0	0.0	0.0	0.0	0.0	100.0	3,901	1.14	1.09
25-29	7.0	32.8	36.8	14.8	5.7	2.1	0.7	0.1	0.0	0.0	0.0	100.0	5,250	1.89	1.76
30-34	3.9	12.2	32.4	26.3	13.9	6.4	3.1	1.1	0.4	0.2	0.1	100.0	5,150	2.76	2.54
35-39	3.1	7.3	18.7	25.0	19.6	11.8	7.4	4.0	1.7	0.9	0.6	100.0	4,876	3.57	3.21
40-44	3.2	6.1	13.9	19.6	17.5	13.5	9.4	7.7	3.8	2.7	2.6	100.0	3,605	4.22	3.69
45-49	2.6	6.0	10.2	15.0	15.6	14.2	11.5	9.6	5.0	4.6	5.9	100.0	2,854	4.84	4.15
Total	8.0	22.2	22.8	17.3	11.4	7.1	4.6	3.0	1.4	1.1	1.1	100.0	26,886	2.82	2.53

the reproductive history of never-married women is not available. However, since almost all births in Indonesia occur within marriage, it is safe to assume that never-married women have had no births. Differences in results between all women and currently married women are greatest at the younger ages because of the large proportion of women who are still single and presumed to have had no births.

By the time a woman reaches the end of her childbearing period, she will have given birth to slightly fewer than 5 children. On average, women have less than one child before reaching age 25, close to 3 children by age 35, and more than 4 by their forties.

Voluntary childlessness is rare, and married women with no live births are predominantly those unable to bear children. Survey data imply that primary infertility in Indonesia is low; only 3 percent of married women in their late 30s and 40s have not given birth.

### **3.4 Birth Intervals**

A child's health status is closely related to the length of the preceding birth interval. Children born after a short birth interval are at greater risk of illness and death than those born after a long interval. Further, the occurrence of closely spaced births gives the mother insufficient time to restore her health, which may limit her ability to take care of her children. The duration of breastfeeding for the older child may be shortened, since the mother must breastfeed the younger child.

Table 3.6.1 shows the percent distribution of births in the five years preceding the survey by length of the previous birth interval. First births have been omitted. Overall, relatively long birth intervals prevail in Indonesia. Half of the births in the five years prior to the survey occurred at least 45 months after the preceding birth, and only 15 percent of births took place within two years of a previous birth.

As shown in previous surveys, the 1997 IDHS indicates that birth intervals vary little according to the child's birth order (except for very high birth orders), sex of prior birth, urban-rural residence, mother's education, and mother's work status. However, there are significant differences in birth intervals by mother's age and by survival status of the preceding child. Younger women have on average shorter birth intervals than older women; the median for women age 15-19 is 21.3 months, while for women age 40-44 it is 54.8 months. For children whose preceding sibling is alive, the median interval between births is 15 months longer than for children whose preceding sibling died (47 months, compared with 32 months).

Table 3.6.1 also indicates that birth intervals vary widely by region. The median birth interval in Java-Bali is one year longer than in other parts of Indonesia (52 months, compared with 39 months in both Outer Java-Bali regions).

Table 3.6.2 shows that median birth intervals vary substantially across provinces, ranging from 31 months in East Timor to 59 months in East Java. The same levels were found in the 1994 IDHS.

### **3.5 Age at First Birth**

Table 3.7 presents the distribution of women by current age and age at first birth. The table indicates that women are delaying having their first child. The distribution is similar to that in the 1994 IDHS and shows that the prevalence of early childbearing has declined over time. While 8 percent of women age 45-49 had their first child before age 15, less than 1 percent of women age 15-19 did so. Again, the percentage of women who had their first child between 15-17 years of age is highest among women age 45-49 (22 percent), and lowest among women age 15-19 years (5 percent). The increase in median age at first birth among Indonesian women can also be observed in the last column of Table 3.7; 20.4 years for women age 45-49 and 21.6 years for women age 30-34.



Table 3.6.1 Birth intervals: background characteristics

Percent distribution of non-first births in the five years preceding the survey by number of months since previous birth, according to demographic and socioeconomic characteristics, Indonesia 1997

Background characteristic	Number of months since previous birth					Total	Median number of months since previous birth	Number of births
	7-17	18-23	24-35	36-47	48+			
<b>Age of mother</b>								
15-19	33.6	37.9	8.9	19.0	0.4	100.0	21.3	63
20-24	11.1	16.3	30.1	22.9	19.7	100.0	32.3	1,062
25-29	7.2	10.0	22.5	18.0	42.2	100.0	42.3	3,185
30-34	4.9	7.8	19.4	15.8	51.9	100.0	49.0	3,205
35-39	4.1	6.9	17.8	14.1	57.1	100.0	54.4	2,244
40-44	3.9	7.5	17.5	15.6	55.4	100.0	54.8	876
45-49	1.7	8.8	19.2	12.9	57.4	100.0	53.0	232
<b>Birth order</b>								
2-3	6.4	9.1	19.2	15.9	49.4	100.0	47.3	6,545
4-6	5.0	7.8	21.9	17.3	47.9	100.0	46.1	3,314
7+	7.2	15.1	28.1	20.1	29.4	100.0	35.8	1,008
<b>Sex of prior birth</b>								
Male	6.3	9.1	21.5	16.4	46.7	100.0	44.9	5,644
Female	5.8	9.5	20.2	17.0	47.5	100.0	45.8	5,222
<b>Survival of prior birth</b>								
Living	4.9	8.8	20.7	16.8	48.9	100.0	46.9	9,946
Dead	19.0	14.6	23.0	15.9	27.6	100.0	31.7	920
<b>Residence</b>								
Urban	6.2	9.9	18.5	14.7	50.8	100.0	48.3	2,777
Rural	6.0	9.1	21.7	17.4	45.8	100.0	44.4	8,090
<b>Region/Residence</b>								
Java-Bali								
Urban	4.3	7.4	17.9	15.4	54.9	100.0	52.1	5,896
Rural	4.7	8.4	16.8	12.9	57.2	100.0	53.8	1,831
Outer Java-Bali I	4.1	7.0	18.4	16.6	53.9	100.0	51.5	4,065
Urban	8.4	11.5	23.7	18.2	38.2	100.0	39.3	3,405
Rural	9.0	12.4	21.6	18.4	38.8	100.0	40.5	660
Outer Java-Bali II	8.2	11.3	24.2	18.2	38.1	100.0	39.0	2,746
Urban	7.6	11.5	25.9	18.3	36.6	100.0	38.9	1,565
Rural	8.8	13.9	22.5	17.7	37.1	100.0	38.6	286
	7.4	11.0	26.6	18.5	36.5	100.0	38.9	1,279
<b>Education</b>								
No education	5.0	8.6	23.5	17.3	45.6	100.0	44.2	1,283
Some primary	5.2	9.1	19.9	17.0	48.8	100.0	46.7	3,308
Completed primary	5.5	8.3	19.8	15.8	50.6	100.0	48.4	3,273
Some secondary+	8.1	10.8	22.0	17.2	41.9	100.0	41.6	3,002
<b>Work status</b>								
Worked in past year	6.2	9.2	21.2	17.0	46.4	100.0	45.0	4,416
Did not work	6.0	9.3	20.7	16.5	47.5	100.0	45.7	6,451
<b>Total</b>	6.1	9.3	20.9	16.7	47.1	100.0	45.3	10,867

Note: The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.



**Table 3.6.2 Birth intervals: region and province**

Percent distribution of non-first births in the five years preceding the survey by number of months since previous birth, according to region and province, Indonesia 1997

Region and province	Number of months since previous birth					Total	Median number of months since previous birth	Number of births
	7-17	18-23	24-35	36-47	48+			
<b>Java-Bali</b>	4.3	7.4	17.9	15.4	54.9	100.0	52.1	5,896
DKI Jakarta	6.7	9.4	18.9	12.5	52.4	100.0	48.9	342
West Java	4.1	9.6	19.6	14.0	52.7	100.0	50.0	2,342
Central Java	4.2	4.8	16.0	22.1	52.8	100.0	51.0	1,488
DI Yogyakarta	4.2	7.5	19.8	10.9	57.6	100.0	58.1	105
East Java	3.8	6.2	16.7	12.1	61.2	100.0	58.9	1,504
Bali	7.4	7.0	19.9	15.3	50.4	100.0	49.3	116
<b>Outer Java-Bali I</b>	8.4	11.5	23.7	18.2	38.2	100.0	39.3	3,405
DI Aceh	6.5	7.2	22.2	17.8	46.4	100.0	45.3	242
North Sumatra	11.8	15.0	27.9	17.3	27.9	100.0	33.1	975
West Sumatra	9.8	12.2	24.2	20.0	34.0	100.0	37.3	268
South Sumatra	6.0	10.1	21.0	18.9	44.0	100.0	43.6	344
Lampung	3.9	8.9	19.8	17.8	49.7	100.0	47.6	368
West Nusa Tenggara	5.4	10.9	24.4	20.5	38.8	100.0	40.9	245
West Kalimantan	8.2	10.0	19.9	19.3	42.6	100.0	41.5	234
South Kalimantan	4.7	8.5	15.9	18.9	52.0	100.0	49.5	141
North Sulawesi	5.5	10.4	19.6	17.6	46.8	100.0	46.4	125
South Sulawesi	10.2	11.5	24.9	17.5	35.7	100.0	37.5	465
<b>Outer Java-Bali II</b>	7.6	11.5	25.9	18.3	36.6	100.0	38.9	1,565
Riau	10.9	9.7	25.1	17.1	37.2	100.0	38.0	249
Jambi	4.9	9.0	20.9	18.1	47.0	100.0	45.1	162
Bengkulu	6.4	11.8	17.9	19.3	44.6	100.0	43.8	84
East Nusa Tenggara	5.9	13.7	27.5	20.6	32.3	100.0	37.5	269
East Timor	8.7	18.5	35.9	18.4	18.5	100.0	31.0	90
Central Kalimantan	6.1	7.6	27.7	17.7	40.9	100.0	43.3	107
East Kalimantan	7.8	8.0	19.1	19.5	45.6	100.0	45.9	143
Central Sulawesi	8.0	8.9	32.9	14.3	35.9	100.0	36.2	121
Southeast Sulawesi	6.8	12.3	25.7	17.3	37.9	100.0	39.0	84
Maluku	8.7	14.0	25.9	22.4	28.9	100.0	36.6	132
Irian Jaya	8.6	14.5	27.5	15.0	33.5	100.0	35.1	123
<b>Total</b>	6.1	9.3	20.9	16.7	47.1	100.0	45.3	10,867

Note: The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.

Table 3.8.1 presents data on differentials in median age at first birth among women age 25-49 years by selected background characteristics. Results of the 1997 IDHS indicate that there are wide differences in the age at which women have their first child. Overall, the median age at first birth is 20.7 years. Urban women start childbearing two years later than their rural counterparts (22.3 years compared with 20.2 years). Women in Java-Bali have their first birth earlier than women in other regions. A positive relationship between educational level and median age at first birth exists. Women with some secondary or higher education start childbearing four years later than women with less than primary education. This relationship is similar for all age groups but is strongest for women age 25-34.

The median age at first birth varies substantially by province, ranging from 19.5 years in Lampung to 22 years or older in DKI Jakarta, DI Yogyakarta, West Sumatra, North Sulawesi, East Nusa Tenggara, East Timor, and Maluku (see Table 3.8.2). Childbearing begins before age 20 in West Java, Lampung, West Nusa Tenggara, and Bengkulu.

Table 3.7 Age at first birth

Percent distribution of women 15-49 by age at first birth, according to current age, Indonesia 1997

Current age	Women with no births	Age at first birth						Total	Number of women	Median age at first birth
		<15	15-17	18-19	20-21	22-24	25+			
15-19	90.6	0.8	5.4	3.3	NA	NA	NA	100.0	7,298	a
20-24	46.8	1.7	12.3	17.3	15.8	6.1	NA	100.0	6,352	a
25-29	20.3	4.3	13.1	18.1	18.2	17.7	8.3	100.0	6,358	21.6
30-34	9.1	4.3	18.9	20.4	16.1	16.7	14.5	100.0	5,678	20.7
35-39	5.9	5.9	20.0	21.8	18.1	15.6	12.9	100.0	5,325	20.2
40-44	6.3	5.2	20.6	19.1	18.3	15.8	14.6	100.0	4,122	20.5
45-49	4.5	7.8	22.3	16.7	16.4	17.4	14.9	100.0	3,457	20.4

NA = Not applicable

<sup>a</sup> Omitted because less than 50 percent of the women in the age group  $x$  to  $x+4$  have had a birth by age  $x$ 

Table 3.8.1 Median age at first birth: background characteristics

Median age at first birth among women age 25-49 years, by current age and selected background characteristics, Indonesia 1997

Background characteristic	Current age					Women age 25-49
	25-29	30-34	35-39	40-44	45-49	
<b>Residence</b>						
Urban	24.3	22.9	21.1	21.5	20.8	22.3
Rural	20.7	20.0	20.0	20.1	20.3	20.2
<b>Region/Residence</b>						
Java-Bali	21.5	20.4	19.9	20.5	20.3	20.6
Urban	24.2	22.3	20.6	21.3	20.9	22.0
Rural	20.5	19.6	19.6	20.0	20.2	20.0
Outer Java-Bali I	21.8	21.5	20.8	20.5	20.1	21.0
Urban	24.8	24.5	22.4	22.2	20.0	23.0
Rural	21.1	20.8	20.4	20.0	20.1	20.5
Outer Java-Bali II	21.8	21.3	21.0	20.5	21.5	21.2
Urban	23.9	23.4	22.0	21.0	21.6	22.7
Rural	21.3	20.6	20.7	20.3	21.4	20.8
<b>Education</b>						
No education	19.5	18.9	19.6	20.2	19.8	19.6
Some primary	19.2	19.5	19.7	19.7	20.0	19.6
Completed primary	20.3	20.0	19.7	19.8	20.0	20.0
Some secondary+	24.2	24.2	22.8	22.9	22.3	23.6
Total	21.6	20.7	20.3	20.5	20.4	20.8

Note: The medians for women age 15-24 could not be determined because half the women have not yet had a birth.

### 3.6 Adolescent Fertility

The topic of teenage fertility is important because teenage mothers and their children are at increased risk of social and health problems. Births to teenage mothers usually follow an early marriage. Because women who marry at an early age often come from poor families with limited education and low health status, their children are more prone to illness and to higher mortality during childhood than other children.

**Table 3.8.2 Median age at first birth: region and province**

Median age at first birth among women age 25-49 years, by current age, region and province, Indonesia 1997

Region and province	Current age					Women age 25-49
	25-29	30-34	35-39	40-44	45-49	
<b>Java-Bali</b>	21.5	20.4	19.9	20.5	20.3	20.6
DKI Jakarta	a	22.9	21.2	21.7	20.7	22.4
West Java	20.4	19.5	19.3	20.1	19.9	19.8
Central Java	21.5	20.5	19.8	20.5	21.1	20.7
DI Yogyakarta	24.5	22.6	22.0	21.6	22.0	22.5
East Java	21.5	20.3	20.3	20.7	19.3	20.6
Bali	22.9	21.6	20.9	20.7	21.0	21.7
<b>Outer Java-Bali I</b>	21.8	21.5	20.8	20.5	20.1	21.0
DI Aceh	21.8	20.2	21.1	20.2	20.2	20.7
North Sumatra	22.5	22.9	21.4	21.0	19.9	21.7
West Sumatra	24.2	23.1	21.2	20.7	19.4	22.1
South Sumatra	22.0	21.7	20.8	20.3	19.6	21.0
Lampung	19.6	19.2	19.4	19.6	19.5	19.5
West Nusa Tenggara	20.5	19.4	19.7	19.1	19.2	19.7
West Kalimantan	21.1	20.8	21.1	20.2	20.1	20.8
South Kalimantan	21.2	20.6	20.2	19.5	19.2	20.2
North Sulawesi	21.8	22.4	21.5	22.5	22.6	22.0
South Sulawesi	22.3	23.6	21.3	21.4	21.0	21.8
<b>Outer Java-Bali II</b>	21.9	21.3	21.0	20.5	21.5	21.3
Riau	22.8	20.9	20.5	20.2	20.5	21.0
Jambi	20.6	19.6	20.1	19.6	20.7	20.0
Bengkulu	19.8	19.4	18.9	19.7	20.1	19.6
East Nusa Tenggara	23.8	23.4	22.6	21.2	22.3	22.7
East Timor	22.8	22.0	22.4	25.5	26.3	23.0
Central Kalimantan	20.4	20.7	20.3	20.2	21.0	20.5
East Kalimantan	22.7	22.1	21.1	19.4	19.2	21.3
Central Sulawesi	21.8	21.2	21.4	20.5	21.0	21.2
Southeast Sulawesi	21.3	20.8	20.5	20.2	21.6	20.9
Maluku	21.8	22.1	22.0	22.6	24.0	22.3
Irian Jaya	21.5	20.7	19.8	20.7	22.3	20.9
<b>Total</b>	21.6	20.7	20.3	20.5	20.4	20.8

Note: The medians for women age 15-24 could not be determined because half the women have not yet had a birth.

<sup>a</sup> Omitted because less than 50 percent of the women had had a birth by age 25.

Table 3.9.1 presents information on fertility among women age 15-19. Teenagers who have never married are assumed to have had no pregnancies and no births. Overall, 12 percent of women 15-19 have started childbearing; 9 percent have had a child, and 3 percent are currently pregnant with their first child. There are large differentials between subgroups of women by age, residence, region, and educational attainment.

As expected, there is a positive relationship between age and fertility; older women are more likely to have started motherhood. While only 1 percent of 15-year-olds have become mothers and 1 percent are pregnant with their first child, by age 19 one in four women has become a mother and 5 percent are pregnant with their first child.



Table 3.9.1 Teenage pregnancy and motherhood: background characteristics  
Percentage of women 15-19 who are mothers or pregnant with their first child,  
by selected background characteristics, Indonesia 1997

Background characteristic	Percentage who are:		Percentage who have begun child-bearing	Number of women
	Mothers	Pregnant with first child		
<b>Age</b>				
15	1.2	1.0	2.1	1,729
16	2.3	1.4	3.7	1,391
17	6.7	4.1	10.7	1,511
18	16.1	2.8	18.9	1,435
19	24.6	5.1	29.8	1,232
<b>Residence</b>				
Urban	4.3	1.3	5.6	2,359
Rural	12.2	3.5	15.8	4,790
<b>Region/Residence</b>				
Java-Bali	11.0	3.2	14.1	4,183
Urban	4.9	1.4	6.3	1,652
Rural	14.9	4.3	19.2	2,531
Outer Java-Bali I	7.8	2.5	10.3	2,061
Urban	2.4	0.7	3.1	516
Rural	9.6	3.1	12.6	1,545
Outer Java-Bali II	7.5	1.8	9.4	919
Urban	4.2	1.4	5.6	218
Rural	8.6	1.9	10.5	700
<b>Education</b>				
No education	16.6	6.7	23.3	109
Some primary	17.2	4.9	22.0	868
Completed primary	17.5	5.2	22.7	1,987
Some secondary+	4.1	1.1	5.2	4,209
<b>Total</b>	<b>9.4</b>	<b>2.7</b>	<b>12.2</b>	<b>7,298</b>

There is a substantial difference in fertility among teenagers who live in urban and rural areas. The proportion of teenagers who have started childbearing is almost three times higher in rural areas than in urban areas. This pattern exists in all regions. Among the regions, Java-Bali has the highest proportion of teenagers who have begun childbearing (14 percent), while in Outer Java-Bali it is 10 percent or less.

Women's educational attainment is inversely related to the initiation of childbearing; women with less education are more likely to have begun childbearing at a younger age. While one in five women with primary education or less has become a mother or is expecting her first child, the proportion among women who have secondary or higher education is only 5 percent.

Variation in teenage fertility is also found among provinces within regions. Table 3.9.2 shows that among the provinces in Java-Bali, West Java and East Java have the highest percentage of teenagers who have begun childbearing (16 percent). Interestingly, except for Lampung, this percentage is also highest among the 27 provinces in the country. In Outer Java-Bali I, the highest percentage is in Lampung (17 percent), while the lowest is in West Sumatra (4 percent). In the Outer Java-Bali II region, Jambi shows the highest percentage (14 percent), while Maluku and East Timor have the lowest (6 percent or less).

**Table 3.9.2 Teenage pregnancy and motherhood: region and province**

Percentage of women 15-19 who are mothers or pregnant with their first child, by region and province, Indonesia 1997

Region and province	Percentage who are:		Percentage who have	Number of women
	Mothers	Pregnant with first child	begun child-bearing	
<b>Java-Bali</b>	10.6	3.0	13.7	4,330
DKI Jakarta	2.5	1.3	3.9	395
West Java	12.7	3.5	16.2	1,479
Central Java	9.1	3.2	12.3	1,077
DI Yogyakarta	3.0	1.5	4.5	119
East Java	13.1	3.2	16.3	1,156
Bali	7.6	2.3	9.9	104
<b>Outer Java-Bali I</b>	7.8	2.5	10.3	2,066
DI Aceh	9.4	2.4	11.8	165
North Sumatra	4.1	1.8	5.9	467
West Sumatra	2.6	0.9	3.5	157
South Sumatra	7.0	1.3	8.3	259
Lampung	12.3	5.2	17.4	226
West Nusa Tenggara	9.8	4.8	14.6	184
West Kalimantan	10.7	1.9	12.6	122
South Kalimantan	10.6	2.7	13.3	101
North Sulawesi	8.7	3.8	12.5	77
South Sulawesi	8.8	1.9	10.7	307
<b>Outer Java-Bali II</b>	7.6	1.8	9.4	912
Riau	6.1	0.6	6.7	137
Jambi	12.1	1.9	14.0	114
Bengkulu	7.3	1.3	8.6	61
East Nusa Tenggara	5.2	2.2	7.4	128
East Timor	5.1	0.0	5.1	28
Central Kalimantan	9.7	2.4	12.2	67
East Kalimantan	9.4	2.6	12.0	84
Central Sulawesi	7.1	3.1	10.2	77
Southeast Sulawesi	8.9	2.5	11.4	65
Maluku	3.6	1.8	5.5	81
Irian Jaya	9.0	1.2	10.3	70
<b>Total</b>	<b>9.4</b>	<b>2.7</b>	<b>12.2</b>	<b>7,298</b>





## CHAPTER 4

### KNOWLEDGE AND EVER USE OF FAMILY PLANNING

#### 4.1 Knowledge of Family Planning Methods and Sources

Knowledge of family planning methods and of places to obtain family planning services is crucial in the decision whether to use a method and which method to use. Presumably, more widespread knowledge of family planning methods will result in greater use of contraceptives.

In the 1997 IDHS, data on knowledge of family planning methods were obtained by first asking the respondent to name the ways that a couple can delay or avoid a pregnancy or birth. If she did not spontaneously mention a particular method, the method was described by the interviewer and she was asked if she recognized the method. Descriptions were included in the questionnaire for eleven methods (pill, IUD, injection, intravag<sup>1</sup>, condom, implants, female sterilization, male sterilization, abortion, periodic abstinence, and withdrawal). In addition, other methods mentioned spontaneously by the respondent such as herbs (*jamu*), abdominal massage (*pijat*), and prolonged abstinence were recorded. For each method recognized, the respondent was asked whether she had ever used the method. Finally, for all modern methods recognized, she was asked where a person could obtain the method if she wanted to use it. If the respondent recognized periodic abstinence, she was asked where a person could go to obtain advice about the method if she wanted to use it.

Table 4.1 indicates that knowledge of family planning methods and sources for methods is practically universal among ever-married women as well as among currently married women. The percentage of women who

Table 4.1 Knowledge of contraceptive methods and source for methods

Percentage of ever-married women and currently married women who know specific contraceptive methods and who know a source (for information or services), by specific methods, Indonesia 1997

Contraceptive method	Know method		Know a source <sup>1</sup>	
	Ever-married women	Currently married women	Ever-married women	Currently married women
<b>Any method</b>	96.9	97.2	96.2	96.6
<b>Any modern method</b>	96.6	96.9	96.1	96.5
Pill	93.4	93.9	92.0	92.5
IUD	84.3	85.0	80.9	81.6
Injection	93.3	93.9	92.3	93.0
Intravag/Diaphragm/Foam	11.4	11.7	9.5	9.8
Condom	65.5	66.1	56.5	57.0
Implants	80.5	81.3	76.0	76.7
Female sterilization	59.7	60.5	55.3	56.0
Male sterilization	35.7	36.3	33.0	33.7
<b>Abortion</b>	31.1	31.5	26.1	26.4
<b>Any traditional method</b>	39.3	39.8	24.2	24.8
Periodic abstinence	27.0	27.7	24.2	24.8
Withdrawal	17.5	17.8	0.0	0.0
Herbs	12.7	12.7	NA	NA
Massage	5.8	5.7	NA	NA
Other traditional methods	0.5	0.5	NA	NA
Number of women	28,810	26,886	28,810	26,886
Mean number of methods	6.2	6.2	5.5	5.5

NA = Not applicable

<sup>1</sup>For modern methods, source refers to a place where the method or procedure can be obtained.

<sup>1</sup>A spermicide placed in the vagina.

know any method is the same among ever-married women and currently married women (97 percent), and virtually all of these women recognize at least one modern method.

The most widely known methods among currently married women are the pill, injection, IUD, and implants—known by 94, 94, 85, and 81 percent of women, respectively. Knowledge of the condom and female sterilization is also high, 66 and 61 percent, respectively. Lesser known contraceptive methods include vaginal methods, e.g., intravag, diaphragm, foam, and jelly (12 percent); abortion (32 percent); and traditional methods, known by two out of five married women.

Figure 4.1 shows that knowledge of contraceptive methods among married women continues to increase. Knowledge of implants and injection increased substantially; the proportion of women who have heard of implants has increased from 68 percent in 1991 to 81 percent in 1997. The corresponding percentages for injection are 88 percent in 1991 and 94 percent in 1997. Although knowledge of the other methods increased during the period 1991-1994, it appears to have plateaued during the period 1994-1997.

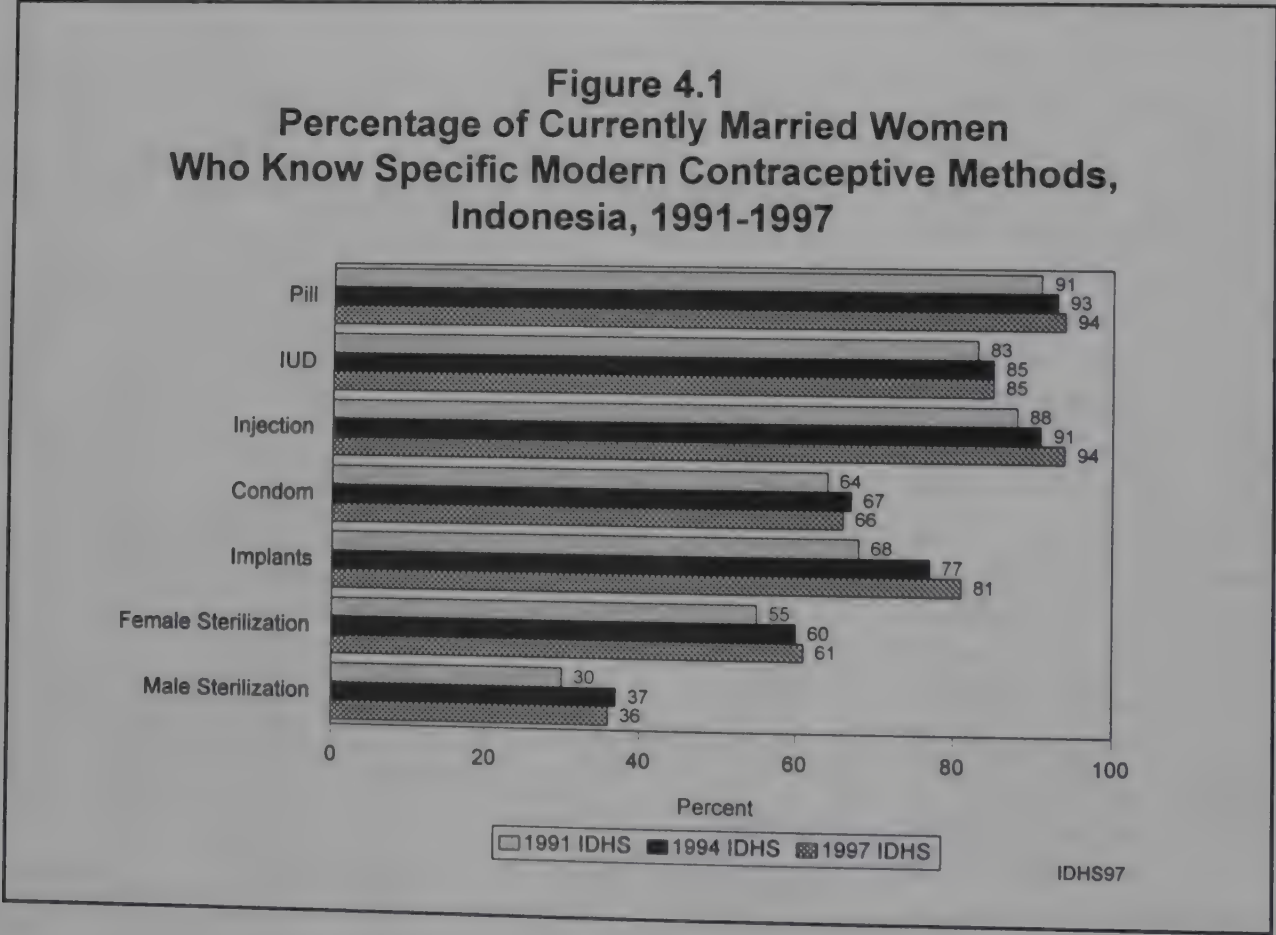


Table 4.2.1 presents the percentage of currently married women who know of contraceptive methods and sources of services by several background characteristics. Among married women, knowledge of at least one contraceptive method is slightly lower among younger and older women than among women in their 20s and 30s. This pattern also occurs regarding knowledge of modern contraceptive methods and knowledge of places to obtain a modern method.

There are no significant differences in knowledge of contraceptive methods and their sources between urban and rural women. The percentage of married women who know at least one family planning method is 99 percent in urban areas and 96 percent in rural areas. The same relationship holds for knowledge of a modern method and the place to obtain it.



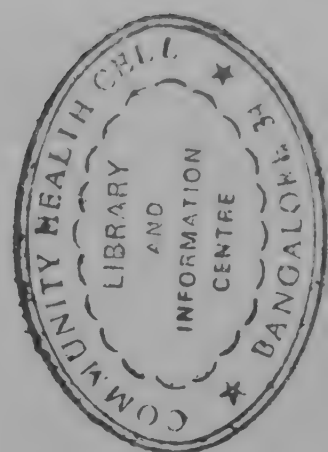


Table 4.2.1 Knowledge of contraceptive methods and source for methods: background characteristics

Percentage of currently married women who know at least one contraceptive method and at least one modern contraceptive method and who know a source (for information or services), by selected background characteristics, Indonesia 1997

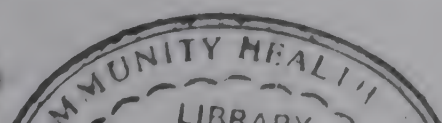
Background characteristic	Know any method	Know a modern method <sup>1</sup>	Know a source for modern method	Number of women
<b>Age</b>				
15-19	94.0	94.0	93.3	1,246
20-24	97.3	97.2	96.9	3,901
25-29	98.6	98.5	98.3	5,250
30-34	98.1	98.0	97.6	5,153
35-39	98.2	98.0	97.6	4,876
40-44	96.3	95.9	95.1	3,605
45-49	93.7	92.6	91.8	2,854
<b>Residence</b>				
Urban	99.2	99.1	98.9	7,428
Rural	96.4	96.1	95.6	19,457
<b>Region/Residence</b>				
Java-Bali	98.3	98.1	97.6	16,888
Urban	99.4	99.3	99.1	5,283
Rural	97.8	97.6	97.0	11,605
Outer Java-Bali I	95.3	94.9	94.6	6,983
Urban	98.7	98.5	98.5	1,494
Rural	94.4	93.9	93.6	5,589
Outer Java-Bali II	95.4	94.9	94.6	3,014
Urban	99.0	98.9	98.4	651
Rural	94.4	93.9	93.5	2,364
<b>Education</b>				
No education	91.2	90.1	89.2	3,415
Some primary	96.5	96.4	95.6	7,304
Completed primary	98.3	98.1	97.8	8,486
Some secondary +	99.3	99.3	99.2	7,680
<b>Total</b>	<b>97.2</b>	<b>96.9</b>	<b>96.5</b>	<b>26,886</b>

<sup>1</sup>Includes pill, IUD, injection, intravag/diaphragm/foam, condom, female sterilization, male sterilization and implants.

There are differences in contraceptive knowledge by education; knowledge is higher as education increases. For example, 91 percent of women with no education have heard of a method. The proportion rises to 97 percent among women with some primary school, and to 99 percent of women with some secondary or higher education. With respect to knowledge of family planning sources, the pattern is similar.

Table 4.2.2 shows that there are only slight differences in contraceptive knowledge among regions. The percentage of married women who have heard of at least one contraceptive method in Java-Bali is 98 percent, followed by Outer Java-Bali I and Outer Java-Bali II (95 percent each).

Women who said that they knew a particular method were also asked where they thought a person could go if they wanted to use the method. The responses to this question are summarized in Table 4.3. For



DEM-120 N98



all modern methods except for female and male sterilization, the most commonly named source is the public health center (*puskesmas*). In the case of female and male sterilization, the government hospital is mentioned as a source by 66 percent or more of women. Women who have heard of periodic abstinence are most likely to cite friends and relatives as the potential source of information on how to use the method.

**Table 4.2.2 Knowledge of contraceptive methods and source for methods: region and province**

Percentage of currently married women who know at least one contraceptive method and one modern contraceptive method and who know a source (for information or services), by region and province, Indonesia 1997

Region and province	Know any method	Know a modern method <sup>1</sup>	Know a source for modern method	Number of women
<b>Java-Bali</b>	98.3	98.1	97.6	16,888
DKI Jakarta	99.9	99.8	99.8	1,045
West Java	97.7	97.7	97.2	5,412
Central Java	98.2	98.1	97.4	4,367
DI Yogyakarta	99.9	99.9	99.9	412
East Java	98.6	98.2	97.6	5,227
Bali	98.3	98.3	98.1	425
<b>Outer Java-Bali I</b>	95.3	94.9	94.6	6,983
Dista Aceh	89.8	87.1	87.1	517
North Sumatra	90.5	90.4	89.8	1,581
West Sumatra	94.1	94.0	93.6	503
South Sumatra	99.2	99.1	98.9	870
Lampung	99.4	99.4	99.3	880
West Nusa Tenggara	99.1	99.0	99.0	524
West Kalimantan	95.8	95.3	95.0	445
South Kalimantan	99.4	99.3	98.1	389
North Sulawesi	99.2	99.2	99.2	329
South Sulawesi	94.2	93.5	93.3	945
<b>Outer Java-Bali II</b>	95.4	94.9	94.6	3,014
Riau	97.4	97.3	96.4	450
Jambi	97.2	97.1	97.1	382
Bengkulu	99.9	99.9	99.5	181
East Nusa Tenggara	93.2	92.7	92.6	446
East Timor	63.6	61.9	61.9	116
Central Kalimantan	95.4	94.8	94.5	222
East Kalimantan	99.7	99.6	98.8	345
Central Sulawesi	98.1	98.1	98.1	251
Southeast Sulawesi	95.8	95.3	94.9	168
Maluku	93.0	92.6	92.1	220
Irian Jaya	98.0	95.7	95.4	233
<b>Total</b>	97.2	96.9	96.5	26,886

<sup>1</sup> Includes pill, IUD, injection, intravag/diaphragm/foam, condom, female sterilization, male sterilization and implants.

Familiarity with private sources such as private doctors and midwives, private hospitals, and pharmacies is acknowledged by a sizeable proportion of women. Twenty-seven percent of women named pharmacies or drugstores as places to obtain condoms, an increase of 9 percentage points compared to that

in 1994 (18 percent). The proportion of women who mentioned private midwife as a source for contraceptive methods is also high. Private midwife is mentioned as the source for injection (32 percent), IUD (22 percent), implants (19 percent), and pill (19 percent). The figures from the 1994 IDHS were considerably lower—18, 11, 9, and 9 percent for injection, IUD, implants, and pill, respectively.

Table 4.3 Source of supply for contraceptive methods

Percent distribution of ever-married women who know a contraceptive method by source of supply or information they would use if they wanted the method, according to specific methods, Indonesia 1997

Source of supply/ information	Contraceptive method								
	Pill	IUD	Injec- tion	Intravag/ Diaphragm/ Foam	Condom	Implants	Female sterili- zation	Male sterili- zation	Periodic absti- nence
<b>Public</b>	44.6	60.1	49.7	38.6	37.4	60.3	77.1	76.8	13.9
Government hospital	3.7	11.1	4.7	9.7	4.6	12.5	65.8	66.7	3.8
Health center ( <i>puskesmas</i> )	37.9	47.7	43.8	27.7	31.5	45.9	11.0	10.0	8.3
Family planning fieldworker	2.4	0.4	0.5	0.9	1.0	0.6	0.1	0.1	1.4
Family planning mobile clinic	0.1	0.1	0.1	0.0	0.0	0.2	0.0	0.0	0.2
Other government	0.5	0.8	0.6	0.2	0.3	1.1	0.2	0.1	0.3
<b>Medical private</b>	27.9	30.6	41.5	41.7	41.6	27.9	14.6	15.3	27.9
Hospital	0.8	1.9	1.2	1.8	0.7	1.8	5.5	6.1	1.0
Family planning clinic	1.2	1.4	1.5	1.0	1.0	1.2	0.6	0.5	0.4
Doctor	2.2	5.6	5.7	4.3	1.5	5.4	5.3	6.1	7.8
Midwife	18.9	21.5	32.4	10.5	11.2	18.9	3.2	2.5	18.5
Pharmacy	4.2	0.1	0.1	23.9	27.0	0.4	0.0	0.0	0.1
Other private	0.6	0.1	0.7	0.2	0.3	0.2	0.0	0.0	0.1
<b>Other private</b>	26.0	5.3	7.8	3.7	7.2	6.1	0.9	0.8	47.9
Village delivery post ( <i>polindes</i> )	2.0	1.2	2.6	0.7	0.9	1.5	0.2	0.0	0.3
Health post ( <i>posyandu</i> )	12.4	3.2	3.9	1.7	4.0	3.2	0.4	0.4	1.7
Family planning post	6.6	0.6	1.0	0.5	1.5	0.8	0.1	0.1	1.8
Traditional healer ( <i>dukun</i> )	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3
Friend/relative	0.3	0.0	0.0	0.5	0.2	0.0	0.1	0.1	41.9
Other source	4.6	0.3	0.2	0.4	0.7	0.4	0.1	0.1	2.9
Don't know	1.5	4.0	1.0	15.9	13.7	5.7	7.3	7.1	10.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	26,918	24,295	26,879	3,284	18,884	23,203	17,202	10,274	7,810

## 4.2 Knowledge of Blue Circle

The self-reliant family planning movement or "KB-Mandiri" was introduced in 1987. This approach is based on the belief that people seek family planning services because of some fundamental motivation to create a better life for their family. The self-reliant family planning concept and campaign encourage family planning participants to take responsibility for their family planning needs, including payment for services and supplies. In order to encourage self-reliance, the government implemented a new service scheme that works through private doctors, midwives, clinics, and dispensaries in encouraging the community to fulfill their needs for family planning. In support of the self-reliance effort, a special information, education, and communication (IEC) campaign utilizing social marketing was developed—the Blue Circle campaign.

The program was initiated in large cities, such as Jakarta, Surabaya, and Bandung, and has gradually been expanded to almost all of the municipalities throughout Indonesia. The private-sector program logo, Blue Circle, is present on the package of contraceptives (e.g., condoms and pills) sold to users. For IEC purposes, the Blue Circle logo is also posted outside the offices of private doctors and midwives, and is widely displayed in other strategic locations such as billboards.

**Table 4.4.1 Knowledge of Blue Circle: background characteristics**

Percentage of ever-married women who have heard of Blue Circle and of those who have heard of Blue Circle, the percentage who think Blue Circle is a private family planning service, by background characteristics, Indonesia 1997

Background characteristic	Among those who heard of Blue Circle, percentage who think it is:				Total	Don't know if heard of Blue Circle	Number of women
	Heard of Blue Circle	Private family planning service	Other family planning service	Don't know			
<b>Age</b>							
15-19	58.1	22.5	7.8	69.7	100.0	13.5	1,310
20-24	63.3	28.5	9.3	62.2	100.0	9.2	4,061
25-29	65.4	29.2	8.6	62.2	100.0	8.2	5,463
30-34	59.0	32.2	8.2	59.6	100.0	10.0	5,375
35-39	50.6	32.9	7.6	59.5	100.0	12.9	5,198
40-44	47.9	30.7	9.3	60.0	100.0	13.5	4,003
45-49	37.5	29.9	5.6	64.5	100.0	16.7	3,399
<b>Residence</b>							
Urban	76.9	34.0	9.5	56.6	100.0	6.0	8,033
Rural	46.9	27.9	7.5	64.6	100.0	13.6	20,777
<b>Region/Residence</b>							
Java-Bali	57.8	29.8	9.8	60.3	100.0	11.8	18,039
Urban	77.1	33.0	11.0	56.0	100.0	6.0	5,722
Rural	49.0	27.5	9.0	63.5	100.0	14.5	12,317
Outer Java-Bali I	52.2	31.2	5.8	63.0	100.0	10.9	7,550
Urban	76.4	38.5	5.9	55.6	100.0	6.8	1,625
Rural	45.6	27.8	5.8	66.5	100.0	12.0	5,925
Outer Java-Bali II	47.3	30.4	4.1	65.5	100.0	10.9	3,221
Urban	76.0	30.7	5.4	63.9	100.0	4.2	686
Rural	39.6	30.2	3.5	66.4	100.0	12.7	2,534
<b>Education</b>							
No education	20.3	17.0	5.4	77.6	100.0	23.5	3,807
Some primary	38.3	20.8	7.6	71.6	100.0	15.5	7,955
Completed primary	59.5	27.0	8.6	64.4	100.0	10.2	8,958
Some secondary +	83.6	38.5	8.7	52.8	100.0	3.2	8,090
<b>Total</b>	<b>55.2</b>	<b>30.2</b>	<b>8.3</b>	<b>61.5</b>	<b>100.0</b>	<b>11.5</b>	<b>28,810</b>

In order to evaluate the progress of the Blue Circle campaign, respondents were asked whether they had ever heard of Blue Circle and, if so, what it was. Table 4.4.1 shows that 55 percent of ever-married women had heard of Blue Circle. Of these, only 30 percent knew that it was a private family planning service, and 8 percent thought Blue Circle referred to other family planning services. Sixty-two percent of those who had heard of Blue Circle said that they did not know what it was.

There has been a slight improvement in the knowledge of Blue Circle. In 1994, 52 percent of women had heard of Blue Circle; of these, 35 percent knew that Blue Circle was a private family planning



service. Thus, in 3 years the level of knowledge of Blue Circle increased by 3 percentage points, from 52 percent in 1994 to 55 percent in 1997. However, a larger proportion of women who have heard of Blue Circle say they do not know what it represents.

Younger women are more familiar with Blue Circle than older women; while about 60 percent of women under 35 years have heard of Blue Circle, the proportion for older women is 51 percent or less.

Urban women are more likely to have heard of Blue Circle than rural women (77 percent compared with 47 percent). This difference is most probably due to the urban focus of the initial campaign. Blue Circle is known throughout the country, with some regional variations. The percentage of women who have heard of Blue Circle is highest in Java-Bali (58 percent), followed by Outer Java-Bali I (52 percent), and Outer Java-Bali II (47 percent).

Knowledge of Blue Circle increases with women's educational attainment, ranging from 20 percent for women with no education, to 84 percent for women with some secondary education.

Table 4.4.2 presents differentials in the knowledge of Blue Circle by province. Eighty-five percent of women in DKI Jakarta have heard of Blue Circle, followed by DI Yogyakarta (79 percent), and East Kalimantan (77 percent). The order in which the provinces ranked in 1994 is almost the same as that in 1997, except the province of West Java was replaced by North Sulawesi in the fifth place. The provincial ranking is consistent with the development of the Blue Circle campaigns that started in large cities. The lowest level of knowledge of Blue Circle is found in East Timor in Outer Java-Bali II (20 percent). However, more than half of these women know that it is a private family planning service.

### **4.3 Knowledge of Golden Circle**

Golden Circle is an extension of the Blue Circle scheme. While the Blue Circle program was successful in increasing the percentage of clients who acquire family planning services through the private sector, the clients need more varied and complete method choices. The Golden Circle program is intended to provide a wide range of contraceptive choices. In order to evaluate the progress of the Golden Circle campaign, IDHS respondents were asked whether they had ever heard of Golden Circle and, if so, whether they knew what it was.

Table 4.5.1 shows that 11 percent of ever-married women have heard of Golden Circle, although the majority of these women do not know the meaning of Golden Circle (69 percent). The percentage of women who know about Golden Circle increased from 8 percent in 1994 to 11 percent in 1997.

Women age 20 to 35 are more likely to know about Golden Circle than do younger or older women. Golden Circle is more widely known in urban areas than in rural areas (17 percent compared with 9 percent). Women's education is positively associated with knowledge of Golden Circle. For example, only 2 percent of women with no education have heard of Golden Circle, compared with 25 percent of women with some secondary education.

Knowledge of Golden Circle varies slightly by region (Table 4.5.2). Ever-married women in Java-Bali are less likely to have heard of Golden Circle (10 percent) than those in Outer Java-Bali I (14 percent or higher). The highest proportion is in Central Kalimantan (30 percent), followed by South Kalimantan (27 percent), Irian Jaya (25 percent), Bengkulu (22 percent), and Bali (20 percent). On the other hand, the lowest level of knowledge of Golden Circle is in West Java and in Dist. Aceh (8 percent each). It is interesting to note that although knowledge about Golden Circle in several provinces is low, a moderate proportion of women who have heard of Golden Circle know that it is a private-sector family planning service (e.g., East Nusa Tenggara, Jambi, and East Timor).

**Table 4.4.2 Knowledge of Blue Circle: region and province**

Percentage of ever-married women who have heard of Blue Circle and of those who have heard of Blue Circle, the percentage who think Blue Circle is a private family planning service, by region and province, Indonesia 1997

Region and province	Among those who heard of Blue Circle, percentage who think it is:				Total	Don't know if heard of Blue Circle	Number of women
	Heard of Blue Circle	Private family planning service	Other family planning service	Don't know			
<b>Java-Bali</b>	57.8	29.8	9.8	60.3	100.0	11.8	18,039
DKI Jakarta	84.6	26.4	19.4	54.1	100.0	3.1	1,152
West Java	53.1	31.1	13.2	55.7	100.0	13.7	5,691
Central Java	51.0	40.7	5.1	54.2	100.0	13.6	4,634
DI Yogyakarta	79.2	57.2	6.5	36.4	100.0	6.0	439
East Java	60.1	18.9	8.1	73.0	100.0	11.1	5,681
Bali	68.8	35.3	5.2	59.4	100.0	7.5	442
<b>Outer Java-Bali I</b>	52.2	31.2	5.8	63.0	100.0	10.9	7,550
Dista Aceh	29.1	47.7	0.5	51.7	100.0	9.6	570
North Sumatra	55.3	25.5	9.2	65.4	100.0	12.1	1,687
West Sumatra	50.8	22.9	6.8	70.3	100.0	6.2	543
South Sumatra	64.1	27.9	8.7	63.3	100.0	8.0	942
Lampung	52.8	29.3	7.7	62.9	100.0	18.5	913
West Nusa Tenggara	47.0	35.5	5.4	59.1	100.0	18.2	595
West Kalimantan	46.4	31.8	3.4	64.8	100.0	9.1	479
South Kalimantan	62.9	37.2	3.1	59.7	100.0	9.9	433
North Sulawesi	66.1	33.4	0.9	65.7	100.0	3.4	340
South Sulawesi	46.9	39.5	0.7	59.9	100.0	7.3	1,049
<b>Outer Java-Bali II</b>	47.3	30.4	4.1	65.5	100.0	10.9	3,221
Riau	48.6	18.8	9.8	71.4	100.0	3.4	477
Jambi	47.4	60.4	0.6	38.9	100.0	16.7	416
Bengkulu	54.6	15.3	12.5	72.3	100.0	11.6	192
East Nusa Tenggara	26.1	50.0	1.7	48.3	100.0	7.0	489
East Timor	19.5	54.5	0.6	45.0	100.0	17.2	120
Central Kalimantan	54.0	25.1	1.2	73.7	100.0	9.1	238
East Kalimantan	76.8	22.7	5.3	71.9	100.0	4.0	363
Central Sulawesi	54.5	36.0	0.2	63.8	100.0	11.3	270
Southeast Sulawesi	44.4	24.0	4.4	71.6	100.0	19.2	178
Maluku	37.9	22.9	2.8	74.3	100.0	17.8	235
Irian Jaya	49.0	16.1	0.9	83.0	100.0	18.3	242
<b>Total</b>	55.2	30.2	8.3	61.5	100.0	11.5	28,810

#### 4.4 Dissemination of Family Planning Information

The objectives of the IEC component of Indonesia's family planning movement include the dissemination of knowledge about family planning in particular and the institutionalization of the "small, happy, and prosperous family" norm in general. IEC activities are conducted through the mass media and through family planning groups and workers. The use of the mass media including newspaper, radio, and television, is integral to the IEC program at both the central and provincial levels. Family planning television programs are shown on both central and regional stations run by the government and the private sector. Family planning information is carried on the radio by government and private stations throughout the country.



Table 4.5.1 Knowledge of Golden Circle: background characteristics

Percentage of ever-married women who have heard of Golden Circle and of those who have heard of Golden Circle, the percentage who think Golden Circle is a private family planning service, by background characteristics, Indonesia 1997

Background characteristic	Among those who heard of Golden Circle, percentage who think it is:				Total	Don't know if heard of Golden Circle	Number of women
	Heard of Golden Circle	Private family planning service	Other family planning service	Don't know			
<b>Age</b>							
15-19	7.9	18.5	0.4	81.2	100.0	27.6	1,310
20-24	11.4	23.7	3.1	73.2	100.0	23.3	4,061
25-29	14.7	26.6	2.7	70.6	100.0	20.9	5,463
30-34	12.9	27.4	6.0	66.7	100.0	20.8	5,375
35-39	9.7	28.0	3.7	68.3	100.0	23.5	5,198
40-44	9.9	29.8	2.7	67.5	100.0	23.2	4,003
45-49	8.0	33.6	0.7	65.7	100.0	24.7	3,399
<b>Residence</b>							
Urban	16.9	28.6	4.4	67.0	100.0	20.0	8,033
Rural	9.1	26.4	2.7	70.9	100.0	23.8	20,777
<b>Region/Residence</b>							
Java-Bali	9.5	24.0	5.1	70.9	100.0	25.6	18,039
Urban	14.1	25.2	6.1	68.8	100.0	22.1	5,722
Rural	7.3	23.1	4.2	72.7	100.0	27.2	12,317
Outer Java-Bali I	13.6	32.3	1.3	66.4	100.0	18.9	7,550
Urban	22.8	36.7	1.7	61.6	100.0	16.5	1,625
Rural	11.0	30.0	1.0	69.0	100.0	19.5	5,925
Outer Java-Bali II	15.6	27.9	1.9	70.2	100.0	16.0	3,221
Urban	26.1	26.6	2.3	71.1	100.0	11.3	686
Rural	12.7	28.6	1.7	69.7	100.0	17.3	2,534
<b>Education</b>							
No education	2.2	18.7	5.7	75.7	100.0	28.5	3,807
Some primary	4.7	14.3	6.0	79.6	100.0	25.4	7,955
Completed primary	8.8	20.4	3.3	76.3	100.0	24.0	8,958
Some secondary +	24.6	32.9	2.8	64.3	100.0	15.9	8,090
<b>Total</b>	11.2	27.3	3.4	69.3	100.0	22.7	28,810

IEC activities are also carried out through community groups that are formed at the village or neighborhood level. IEC activities at periodic community group meetings are generally handled by a family planning fieldworker or by the group leader. Family planning information is also disseminated through word of mouth among neighbors and friends (*gethok tular*).

Family planning workers are defined as those at the grassroots level, including family planning fieldworker supervisors, family planning fieldworkers, cadres, heads and members of village family planning posts, and heads and members of subvillage family planning posts. These people play a very important role in the IEC component of the family planning movement.

Table 4.6.1 shows the percentage of currently married women who were visited by family planning workers in the 6 months prior to the survey. Overall, 25 percent of married women were visited by family planning workers, down slightly since 1994 (28 percent).



Table 4.5.2 Knowledge of Golden Circle: region and province

Percentage of ever-married women who have heard of Golden Circle and of those who have heard of Golden Circle, the percentage who think Golden Circle is a private family planning service, by region and province, Indonesia 1997

Region and province	Among those who heard of Golden Circle, percentage who think it is:				Total	Don't know if heard of Golden Circle	Number of women
	Heard of Golden Circle	Private family planning service	Other family planning service	Don't know			
<b>Java-Bali</b>	9.5	24.0	5.1	70.9	100.0	25.6	18,039
DKI Jakarta	10.6	16.6	5.5	77.9	100.0	22.7	1,152
West Java	7.6	20.4	13.5	66.1	100.0	23.7	5,691
Central Java	11.0	41.0	1.2	57.8	100.0	22.2	4,634
DI Yogyakarta	15.7	37.1	1.0	61.9	100.0	22.6	439
East Java	8.6	10.1	3.1	86.9	100.0	31.6	5,681
Bali	19.8	21.4	0.4	78.2	100.0	16.6	442
<b>Outer Java-Bali I</b>	13.6	32.3	1.3	66.4	100.0	18.9	7,550
Dista Aceh	7.6	33.8	0.9	65.3	100.0	11.7	570
North Sumatra	8.7	29.1	1.3	69.6	100.0	22.0	1,687
West Sumatra	16.9	16.3	4.3	79.4	100.0	10.6	543
South Sumatra	17.6	27.5	0.5	72.0	100.0	17.7	942
Lampung	13.7	27.5	3.9	68.6	100.0	36.0	913
West Nusa Tenggara	14.8	39.7	0.7	59.5	100.0	24.8	595
West Kalimantan	12.1	33.6	0.7	65.7	100.0	13.7	479
South Kalimantan	26.8	32.4	0.0	67.6	100.0	19.6	433
North Sulawesi	14.8	33.8	0.0	66.2	100.0	9.6	340
South Sulawesi	13.6	49.5	0.0	50.5	100.0	9.6	1,049
<b>Outer Java-Bali II</b>	15.6	27.9	1.9	70.2	100.0	16.0	3,221
Riau	14.4	7.4	1.3	91.3	100.0	7.3	477
Jambi	11.2	67.7	0.0	32.3	100.0	22.6	416
Bengkulu	22.0	12.3	10.1	77.7	100.0	18.4	192
East Nusa Tenggara	8.5	71.3	0.0	28.7	100.0	10.9	489
East Timor	8.5	61.7	0.0	38.3	100.0	20.3	120
Central Kalimantan	30.1	26.1	0.7	73.2	100.0	12.4	238
East Kalimantan	19.5	19.2	4.5	76.2	100.0	13.5	363
Central Sulawesi	15.2	31.9	0.0	68.1	100.0	14.2	270
Southeast Sulawesi	15.8	22.4	0.8	76.8	100.0	24.6	178
Maluku	8.9	16.3	2.0	81.7	100.0	24.1	235
Irian Jaya	25.2	11.8	0.4	87.7	100.0	23.6	242
<b>Total</b>	11.2	27.3	3.4	69.3	100.0	22.7	28,810

Contraceptive users are much more likely to be visited than nonusers (35 percent, compared with 12 percent). Women under 40 are more likely to receive a visit from a family planning worker than are those 40 and over. The proportion of women visited by family planning workers does not vary significantly by subgroups of women, except that women with no education have the least chance of being visited by family planning workers (17 percent).

While the proportion of married women who were visited by family planning workers varies only moderately by region (Table 4.6.2), there are larger variations among provinces. In Java-Bali, the percentage ranges from 14 percent in East Java to 42 percent in DI Yogyakarta. In Outer Java-Bali I, the corresponding percentages are 11 percent in North Sumatra and 44 percent in West Nusa Tenggara. In Outer Java-Bali II, the lowest percentage is in Jambi (16 percent), and the highest is in Central Kalimantan (49 percent).

**Table 4.6.1 Visits by family planning fieldworkers: background characteristics**

Percentage of currently married women who have been visited by a family planning fieldworker in the six months prior to the survey, by whether using contraception and selected background characteristics, Indonesia 1997

Background characteristic	Using contraception		Total	Number of women
	Yes	No		
<b>Age</b>				
15-19	37.0	8.4	21.2	1,246
20-24	38.7	13.6	28.8	3,901
25-29	39.9	16.9	31.2	5,250
30-34	36.4	13.9	28.3	5,153
35-39	34.5	10.8	25.2	4,876
40-44	25.6	9.3	18.4	3,605
45-49	22.8	6.3	12.0	2,854
<b>Residence</b>				
Urban	32.9	11.0	24.1	7,428
Rural	35.7	11.9	25.3	19,457
<b>Region/Residence</b>				
Java-Bali	33.8	12.1	25.2	16,888
Urban	33.9	11.3	25.1	5,283
Rural	33.7	12.5	25.3	11,605
Outer Java-Bali I	34.1	9.8	22.4	6,983
Urban	26.3	9.7	19.2	1,494
Rural	36.3	9.8	23.3	5,589
Outer Java-Bali II	44.5	13.8	29.5	3,014
Urban	38.4	11.7	26.6	651
Rural	46.2	14.3	30.3	2,364
<b>Education</b>				
No education	28.2	7.9	16.9	3,415
Some primary	34.4	10.0	23.3	7,304
Completed primary	36.9	13.4	27.6	8,486
Some secondary+	35.3	14.0	27.2	7,680
<b>Total</b>	<b>34.9</b>	<b>11.7</b>	<b>25.0</b>	<b>26,886</b>

## 4.5 Sources of Family Planning Information

Mass media programs used to disseminate information about family planning in Indonesia through radio and television include spot shows, dramas, reports, discussions, and regular series. Another important means of disseminating family planning information is the family planning worker system, which operates in all parts of the country. Family planning workers focus their efforts on motivating family planning use, providing family planning information and recording service statistics. An important aspect of a family planning worker's job is institutionalization, i.e., working with the community and organizations such as mother's clubs, religious groups, women's organizations (PKK), and the organization for wives of civil servants (*Dharma Wanita*). Income-generating activities and rewards to long-term users are among the strategies used to introduce family planning and to maintain motivation. In an effort to investigate which sources of family planning information are reaching ever-married women in Indonesia, the 1997 IDHS included a set of questions on this subject (see Table 4.7.1).

Table 4.6.2 Visits by family planning fieldworkers: region and province

Percentage of currently married women who have been visited by a family planning fieldworker in the six months prior to the survey, by whether using contraception and region and province, Indonesia 1997

Region and province	Using contraception		Total	Number of women
	Yes	No		
<b>Java-Bali</b>	33.8	12.1	25.2	16,888
DKI Jakarta	41.9	9.3	28.5	1,045
West Java	42.8	14.9	31.0	5,412
Central Java	38.8	14.8	29.7	4,367
DI Yogyakarta	51.9	15.2	42.0	412
East Java	18.7	7.6	14.3	5,227
Bali	21.4	8.0	17.1	425
<b>Outer Java-Bali I</b>	34.1	9.8	22.4	6,983
Dista Aceh	40.8	4.6	18.0	517
North Sumatra	18.3	4.6	10.9	1,581
West Sumatra	19.4	8.8	13.5	503
South Sumatra	26.5	9.7	19.4	870
Lampung	45.8	18.1	36.5	880
West Nusa Tenggara	61.1	22.1	44.1	524
West Kalimantan	42.8	9.9	29.0	445
South Kalimantan	28.7	10.5	21.4	389
North Sulawesi	31.6	18.5	27.9	329
South Sulawesi	38.5	10.2	21.9	945
<b>Outer Java-Bali II</b>	44.5	13.8	29.5	3,014
Riau	40.1	9.7	24.3	450
Jambi	22.7	5.9	16.3	382
Bengkulu	57.8	17.9	44.5	181
East Nusa Tenggara	41.7	21.0	29.1	446
East Timor	54.8	7.7	20.2	116
Central Kalimantan	60.8	29.7	49.4	222
East Kalimantan	45.9	12.7	32.4	345
Central Sulawesi	61.3	10.4	36.7	251
Southeast Sulawesi	59.2	11.5	36.9	168
Maluku	50.5	10.9	26.8	220
Irian Jaya	27.3	16.6	22.0	233
<b>Total</b>	<b>34.9</b>	<b>11.7</b>	<b>25.0</b>	<b>26,886</b>

More than half (57 percent) of ever-married women have never received any family planning information from either the radio or television during the month before the survey. Of the 43 percent who have received any information on family planning through the mass media, television messages reach more women (38 percent) than radio messages (23 percent); 19 percent of women have received information on family planning from both the radio and television.

Ever-married women who live in rural areas are more likely not to have access to information on family planning through the mass media than those living in urban areas (61 compared with 49 percent). The percentage of women who have access to family planning information through the television is 50 percent in urban areas, compared with 34 percent in rural areas.

Women with lower education tend to lack access to family planning information in the mass media, compared with better educated women. Likewise, women with higher education tend to receive more information from the television than do women with less education.



**Table 4.7.1 Heard family planning on radio and television: background characteristics**

Percent distribution of ever-married women by whether they heard a radio or television message about family planning in the month prior to interview, according to selected background characteristics, Indonesia 1997

Background characteristic	Heard a radio or television message about family planning				Total	Number of women
	Neither	Radio only	Television only	Both		
<b>Residence</b>						
Urban	48.6	1.7	27.8	21.9	100.0	8,033
Rural	60.8	5.1	16.6	17.4	100.0	20,777
<b>Region/Residence</b>						
Java-Bali	59.2	3.1	19.7	18.0	100.0	18,039
Urban	50.2	1.5	26.2	22.0	100.0	5,722
Rural	63.4	3.8	16.6	16.1	100.0	12,317
Outer Java-Bali I	54.9	5.1	20.4	19.7	100.0	7,550
Urban	45.9	1.8	32.7	19.6	100.0	1,625
Rural	57.3	6.0	17.0	19.7	100.0	5,925
Outer Java-Bali II	53.5	7.9	18.3	20.3	100.0	3,221
Urban	42.2	2.2	29.4	26.0	100.0	686
Rural	56.6	9.5	15.3	18.7	100.0	2,534
<b>Education</b>						
No education	73.4	4.7	10.8	11.1	100.0	3,807
Some primary	64.1	4.5	16.0	15.4	100.0	7,955
Completed primary	56.0	4.8	19.6	19.5	100.0	8,958
Some secondary +	44.9	2.8	27.8	24.5	100.0	8,090
<b>Total</b>	<b>57.4</b>	<b>4.1</b>	<b>19.7</b>	<b>18.7</b>	<b>100.0</b>	<b>28,810</b>

Table 4.7.2 presents the percent distribution of ever-married women according to source of family planning information through electronic media, by province. Provinces with high proportions of women who receive family planning information through radio and television include North Sulawesi, Jambi, Central Kalimantan, Lampung, West Java, and South Sumatra. Women in North Sulawesi and West Java are more likely to receive information about family planning from television (61 and 57 percent, respectively). On the other hand, women in Lampung are most likely to get information on family planning from a radio (52 percent).

Important information for program managers is that large proportions (70 percent or more) of women in certain provinces have no access to family planning information through radio and television. These provinces include East Java, West Kalimantan, East Nusa Tenggara, and East Timor.

Table 4.8.1 indicates that most ever-married women (84 percent) have no access to family planning information through the printed media. The proportion of women who have access to printed materials on family planning is quite low—11 percent through newspapers and magazines, 9 percent through posters, and 5 percent through leaflets and brochures.

Throughout the country, urban women have better access to family planning information through the printed media than women in rural areas. Education appears to have a positive association with access to family planning information through the printed media. Women with some secondary education are most likely to receive family planning information from the printed media, i.e., newspapers and magazines (25 percent), posters (17 percent), and leaflets and brochures (10 percent).

Table 4.7.2 Heard family planning on radio and television: region and province

Percent distribution of ever-married women by whether they heard a radio or television message about family planning in the month prior to interview, according to region and province, Indonesia 1997

Region and province	Heard a radio or television message about family planning				Total	Number of women
	Neither	Radio only	Television only	Both		
<b>Java-Bali</b>	59.2	3.1	19.7	18.0	100.0	18,039
DKI Jakarta	47.4	1.2	31.5	19.9	100.0	1,152
West Java	37.8	5.0	31.0	26.3	100.0	5,691
Central Java	65.0	3.3	12.8	18.9	100.0	4,634
DI Yogyakarta	60.5	4.0	13.6	21.9	100.0	439
East Java	79.1	1.5	11.7	7.8	100.0	5,681
Bali	49.1	1.1	24.2	25.6	100.0	442
<b>Outer Java-Bali I</b>	54.9	5.1	20.4	19.7	100.0	7,550
Dista Aceh	64.1	2.6	19.0	14.3	100.0	570
North Sumatra	64.6	1.3	25.2	9.0	100.0	1,687
West Sumatra	69.8	3.2	16.7	10.3	100.0	543
South Sumatra	39.2	5.4	27.6	27.8	100.0	942
Lampung	36.1	11.5	11.9	40.5	100.0	913
West Nusa Tenggara	47.8	8.5	13.6	30.1	100.0	595
West Kalimantan	78.3	3.1	10.7	7.9	100.0	479
South Kalimantan	47.0	2.3	29.4	21.3	100.0	433
North Sulawesi	32.0	7.0	29.5	31.5	100.0	340
South Sulawesi	60.8	7.1	18.0	14.0	100.0	1,049
<b>Outer Java-Bali II</b>	53.5	7.9	18.3	20.3	100.0	3,221
Riau	59.9	4.8	17.9	17.3	100.0	477
Jambi	32.6	15.1	21.9	30.4	100.0	416
Bengkulu	50.4	4.1	20.8	24.6	100.0	192
East Nusa Tenggara	75.8	11.1	4.3	8.8	100.0	489
East Timor	70.4	9.6	3.9	16.1	100.0	120
Central Kalimantan	34.7	12.7	25.5	27.2	100.0	238
East Kalimantan	47.0	2.5	33.8	16.6	100.0	363
Central Sulawesi	53.1	3.6	26.3	17.0	100.0	270
Southeast Sulawesi	47.9	8.4	22.5	21.1	100.0	178
Maluku	57.4	5.3	16.4	20.9	100.0	235
Irian Jaya	54.4	7.8	6.2	31.3	100.0	242
<b>Total</b>	<b>57.4</b>	<b>4.1</b>	<b>19.7</b>	<b>18.7</b>	<b>100.0</b>	<b>28,810</b>

Table 4.8.2 presents the proportions of ever-married women who receive family planning information through the printed media, by province. The majority of women (90 percent or more) have no access to family planning information through the printed media in West Kalimantan (92 percent), East Timor (91 percent), North Sumatra (90 percent), and South Sulawesi (90 percent). On the other hand, provinces with the highest coverage to family planning information through newspapers and magazines are DKI Jakarta (27 percent) and East Kalimantan (22 percent). Posters are most often cited as a source of family planning information by women in East Kalimantan (17 percent), Dista Aceh (16 percent), and DKI Jakarta (16 percent), while leaflets and brochures are seen by 10 percent or more of women in Dista Aceh, Irian Jaya, and Central Kalimantan.

**Table 4.8.1 Saw family planning message in print media: background characteristics**

Percentage of ever-married women by whether they saw a message about family planning in the print media in the last few months before the interview, and selected background characteristics, Indonesia 1997

Background characteristic	No message seen	Saw a message about family planning in the print media			Number of women
		News-paper, magazine	Poster	Leaflet, brochure	
<b>Residence</b>					
Urban	74.5	20.6	12.6	7.2	8,033
Rural	87.7	7.3	7.4	4.1	20,777
<b>Region/Residence</b>					
Java-Bali	83.5	11.0	9.3	4.5	18,039
Urban	74.7	20.3	12.2	6.3	5,722
Rural	87.5	6.8	7.9	3.7	12,317
Outer Java-Bali I	85.7	10.1	7.8	5.5	7,550
Urban	75.7	19.8	12.7	9.1	1,625
Rural	88.4	7.5	6.5	4.6	5,925
Outer Java-Bali II	83.5	12.9	8.6	6.0	3,221
Urban	70.0	24.6	16.2	10.8	686
Rural	87.1	9.7	6.5	4.7	2,534
<b>Education</b>					
No education	97.7	0.9	1.7	1.5	3,807
Some primary	91.1	4.6	5.3	2.7	7,955
Completed primary	86.2	8.1	7.9	4.1	8,958
Some secondary +	68.3	25.3	16.7	9.7	8,090
<b>Total</b>	<b>84.1</b>	<b>11.0</b>	<b>8.8</b>	<b>5.0</b>	<b>28,810</b>

Table 4.9.1 presents data on women's perception regarding appropriate sources of family planning information. Midwives and family planning officers are considered appropriate sources of family planning information by more than eight in ten women, while doctors are considered appropriate by 77 percent of women. Women's groups and village leaders are considered good sources of family planning information by more than half of women, while television and radio are deemed acceptable mass media sources (78 and 66 percent, respectively).

Differences by age are minimal; however, urban women are more likely than rural women to feel sources are appropriate vehicles for disseminating family planning information. This applies for every type of source cited.

Overall, women with higher education are more likely to accept various media as a source for family planning information than are women with less education. At least eight in ten women with some secondary or higher education believe that doctors, midwives, family planning officers, and television are appropriate sources of family planning information. The proportions for less educated women are lower.

Provincial differentials in the proportion of women who believe that a specific source of family planning information is appropriate are shown in Table 4.9.2. In most provinces, midwives are the most popular source of family planning information, followed by family planning workers, television, and doctors. It is interesting to note that in Java-Bali, and especially in the province of DI Yogyakarta, a relatively large proportion of women believe that community and village religious leaders are appropriate sources of family planning information.



**Table 4.8.2 Saw family planning message in print media: region and province**

Percentage of ever-married women by whether they saw a message about family planning in the print media in the last few months before the interview, and region and province, Indonesia 1997

Region and province	No message seen	Saw a message about family planning in the print media			Number of women
		News-paper, magazine	Poster	Leaflet, brochure	
<b>Java-Bali</b>	83.5	11.0	9.3	4.5	18,039
DKI Jakarta	67.7	26.8	15.6	5.0	1,152
West Java	81.4	14.7	7.6	5.7	5,691
Central Java	89.0	8.8	4.8	2.8	4,634
DI Yogyakarta	75.5	18.9	13.0	5.7	439
East Java	84.5	5.6	13.2	4.7	5,681
Bali	88.6	9.2	5.4	3.4	442
<b>Outer Java-Bali I</b>	85.7	10.1	7.8	5.5	7,550
Dista Aceh	80.3	11.7	16.3	11.2	570
North Sumatra	89.9	6.6	5.8	2.9	1,687
West Sumatra	81.2	12.8	12.6	7.2	543
South Sumatra	78.4	17.0	8.8	7.5	942
Lampung	85.6	9.7	8.2	6.5	913
West Nusa Tenggara	85.6	7.4	10.0	8.5	595
West Kalimantan	92.0	7.6	2.0	1.7	479
South Kalimantan	84.2	11.7	8.7	7.1	433
North Sulawesi	79.4	17.5	9.5	4.4	340
South Sulawesi	90.1	7.7	3.7	2.9	1,049
<b>Outer Java-Bali II</b>	83.5	12.9	8.6	6.0	3,221
Riau	83.7	12.4	8.4	6.6	477
Jambi	86.8	12.2	3.3	2.9	416
Bengkulu	83.4	12.2	10.4	6.5	192
East Nusa Tenggara	89.3	8.7	6.1	4.9	489
East Timor	91.2	8.5	2.3	2.0	120
Central Kalimantan	82.1	8.3	11.4	10.4	238
East Kalimantan	73.2	21.9	16.9	8.8	363
Central Sulawesi	87.3	11.1	4.1	4.1	270
Southeast Sulawesi	84.5	10.0	8.5	4.5	178
Maluku	83.1	14.5	9.3	4.1	235
Irian Jaya	73.2	19.9	14.1	11.0	242
<b>Total</b>	84.1	11.0	8.8	5.0	28,810

#### 4.6 Discussion on Family Planning With Husband

In the 1997 IDHS, nonsterilized currently married women were asked if they had ever discussed family planning with their spouses during the year before the survey. Table 4.10 shows that 65 percent of respondents discussed family planning with their husbands, and 35 percent never did. Women age 20-29 are more likely to discuss family planning with their spouses than are older women age 40-49 (74 percent or more, compared with 54 percent or less).

Table 4.9.1 Appropriate sources for family planning information: background characteristics

Percentage of ever-married women who believe specific sources are appropriate for obtaining family planning information, by background characteristics, Indonesia 1997

Background characteristic	Radio	Television	Newspaper/Magazine	Poster	Pamphlet	Family planning officer	Teacher	Community leader	Religious leader	Doctor	Mid-wife	Village leader	Women's group	Pharmacy	Number of women
<b>Age</b>															
15-19	61.1	75.6	48.5	37.6	34.3	79.5	25.6	38.1	32.0	74.2	85.6	40.2	44.8	31.6	1,310
20-24	66.8	79.0	49.6	38.5	35.5	81.8	23.8	43.2	37.2	77.3	87.3	49.6	52.4	33.7	4,061
25-29	68.3	80.6	52.0	41.5	38.1	83.0	27.0	48.1	41.1	79.8	88.7	49.4	55.5	34.7	5,463
30-34	66.0	78.9	49.3	39.2	36.5	81.5	27.9	46.9	42.2	77.6	86.5	51.2	55.6	34.8	5,375
35-39	66.3	78.4	49.2	38.7	36.8	81.6	31.8	47.9	45.1	77.2	87.1	54.1	54.7	36.0	5,198
40-44	65.3	77.1	48.1	37.5	35.2	79.0	31.4	46.4	42.9	73.9	84.4	51.8	53.9	34.7	4,003
45-49	61.0	72.8	43.9	35.4	33.0	73.7	31.3	44.7	40.7	71.8	80.7	48.9	49.5	32.4	3,399
<b>Residence</b>															
Urban	66.9	84.4	59.7	47.0	43.9	84.0	31.2	51.9	48.4	83.3	89.3	51.1	60.6	41.1	8,033
Rural	65.2	75.6	44.9	35.5	33.0	79.2	27.7	43.8	38.5	74.0	84.9	50.2	50.8	31.8	20,777
<b>Region/Residence</b>															
Java-Bali	69.2	81.0	52.3	42.2	39.3	83.9	32.8	53.7	47.6	79.4	87.8	59.9	61.4	39.6	18,039
Urban	69.9	85.3	61.3	49.2	45.9	87.1	34.1	57.6	53.5	84.0	90.1	57.2	65.9	44.0	5,722
Rural	68.9	79.0	48.2	38.9	36.2	82.5	32.2	51.9	45.0	77.3	86.7	61.0	59.2	37.5	12,317
Outer Java-Bali I	58.9	74.1	43.5	33.1	31.0	74.9	22.4	34.3	30.5	71.2	83.2	36.0	41.4	25.4	7,550
Urban	56.7	82.0	55.0	40.0	37.6	76.0	23.5	37.5	34.4	80.3	87.0	35.5	46.8	31.4	1,625
Rural	59.5	71.9	40.4	31.2	29.2	74.7	22.1	33.5	29.5	68.7	82.2	36.1	40.0	23.8	5,925
Outer Java-Bali II	62.3	70.7	43.2	32.5	29.7	74.2	19.8	30.7	30.8	73.2	83.8	32.0	38.0	26.5	3,221
Urban	66.4	83.1	57.0	45.1	43.5	77.4	25.0	38.8	40.3	84.2	87.8	37.1	48.4	40.2	686
Rural	61.2	67.3	39.5	29.1	25.9	73.3	18.4	28.5	28.3	70.2	82.7	30.7	35.4	22.8	2,534
<b>Education</b>															
No education	60.9	67.1	34.0	28.3	26.9	71.7	30.4	43.2	39.8	65.6	78.0	49.6	43.6	29.7	3,807
Some primary	66.3	76.9	44.3	35.7	33.0	79.7	31.0	45.0	41.6	75.2	85.9	53.7	53.0	34.5	7,955
Completed primary	66.1	78.4	48.4	37.6	34.5	81.4	26.1	46.3	39.6	76.4	86.7	51.5	53.7	33.1	8,958
Some secondary+	67.0	83.9	61.4	47.8	45.0	84.4	28.3	48.2	43.4	83.2	89.6	46.5	58.5	37.9	8,090
<b>Total</b>	65.7	78.0	49.0	38.7	36.0	80.5	28.6	46.1	41.3	76.5	86.1	50.5	53.5	34.4	28,810

## 4.7 Ever Use of Family Planning Methods

Information on the proportion of women who have ever used family planning methods is useful for evaluating programs. In the 1997 IDHS, for each method recognized, the respondent was asked if she had ever used that method. Table 4.11 indicates that 76 percent of ever-married women, and 78 percent of currently married women have used or are using any method. The percentage of ever users of any method in 1997 increased slightly, compared with that in 1994 (73 percent for ever-married women, and 76 percent for currently married women).

Among ever-married women, the most common method ever used is the pill (43 percent), followed by injection (42 percent). The next two most common methods are the IUD (18 percent) and implants (9 percent). Much smaller proportions of women report having used the condom (4 percent) and female sterilization (3 percent), as well as traditional methods: periodic abstinence (3 percent), withdrawal (3 percent), and herbs (3 percent). The pattern is similar for currently married women.

Table 4.12 shows the distribution of ever-married women according to the number of living children when they first used family planning. The table is used primarily to identify the acceptance of the small family norm and the use of family planning as a method for spacing births. Data in Table 4.12 show that 43 percent of ever-married women started using family planning before they had two children. Thirty-seven percent of women used family planning for the first time when they had one child, and 15 percent used it when they had two children. Younger women tend to start using family planning when they have fewer



children. While less than 1 percent of women age 45-49 years used contraception when they did not have any children, the corresponding proportion of women age 20-24 and 15-19 was 14 percent and 21 percent, respectively. More than half of women 20-29 started using family planning when they had one child.

Table 4.9.2 Appropriate sources for family planning information: region and province

Percentage of ever-married women who believe specific sources are appropriate for obtaining family planning information, by region and province, Indonesia 1997

Region and province	Radio	Tele- vision	News- paper/ Maga- zine	Poster	Pamph- let	Family plan- ning officer	Teach- er	Com- munity- leader	Reli- gious leader	Doctor	Mid- wife	Vil- lage leader	Wom- en's group	Phar- macy	Number of women
<b>Java-Bali</b>	69.2	81.0	52.3	42.2	39.3	83.9	32.8	53.7	47.6	79.4	87.8	59.9	61.4	39.6	18,039
DKI Jakarta	82.2	95.3	83.7	74.8	67.9	98.7	50.8	73.7	71.3	99.1	99.4	66.9	84.1	63.3	1,152
West Java	58.2	75.4	37.4	20.0	18.8	76.1	11.7	37.6	32.7	64.7	81.9	37.3	32.7	17.7	5,691
Central Java	69.0	76.5	48.0	33.2	33.2	77.4	31.5	50.6	44.0	71.9	79.4	64.1	63.2	35.7	4,634
DI Yogyakarta	86.9	90.3	83.3	73.6	74.6	98.3	67.2	88.1	80.4	95.2	97.5	86.8	90.0	70.3	439
East Java	75.1	85.8	61.1	61.7	55.2	92.8	49.0	66.2	59.4	93.7	96.5	75.8	82.0	57.3	5,681
Bali	83.6	91.4	61.9	52.1	50.6	86.4	28.5	44.4	31.8	95.0	98.3	52.6	57.3	39.9	442
<b>Outer Java-Bali I</b>	58.9	74.1	43.5	33.1	31.0	74.9	22.4	34.3	30.5	71.2	83.2	36.0	41.4	25.4	7,550
Dista Aceh	54.9	76.2	44.5	43.6	40.4	81.2	12.0	21.7	16.5	75.7	89.1	22.1	33.4	20.6	570
North Sumatra	31.3	61.2	29.2	20.6	17.6	58.6	13.8	25.0	20.3	52.8	69.5	24.9	29.2	20.6	1,687
West Sumatra	72.4	85.0	62.5	49.6	44.9	91.5	38.1	52.2	52.6	91.9	95.4	55.1	64.6	37.3	543
South Sumatra	68.5	88.5	54.0	37.4	36.5	82.4	22.6	35.3	31.4	76.4	92.9	39.7	48.3	24.9	942
Lampung	93.6	92.2	62.5	48.5	46.2	91.4	31.3	40.4	37.2	88.3	95.0	56.0	67.3	40.1	913
West Nusa Tenggara	88.7	90.3	55.3	48.0	47.2	95.0	41.8	73.4	62.2	80.4	93.4	70.7	51.7	33.7	595
West Kalimantan	71.8	78.1	52.9	39.4	37.1	87.7	39.5	49.1	44.8	87.6	91.3	46.7	53.2	32.1	479
South Kalimantan	74.8	85.7	64.0	60.7	59.1	85.1	44.5	57.6	60.4	87.9	93.4	47.9	67.2	40.3	433
North Sulawesi	49.1	67.9	30.6	16.7	15.6	65.7	12.6	22.7	16.7	56.6	59.1	22.6	29.8	18.3	340
South Sulawesi	33.4	45.6	15.6	4.9	4.1	49.9	1.3	6.5	5.0	53.5	71.2	5.9	7.2	6.0	1,049
<b>Outer Java-Bali II</b>	62.3	70.7	43.2	32.5	29.7	74.2	19.8	30.7	30.8	73.2	83.8	32.0	38.0	26.5	3,221
Riau	75.4	85.8	59.7	48.1	47.4	75.5	34.4	48.5	46.4	85.2	91.1	48.4	59.5	46.4	477
Jambi	59.1	62.4	32.5	16.4	13.2	47.3	11.7	25.6	17.6	59.3	80.1	43.7	37.8	14.6	416
Bengkulu	91.6	95.2	75.8	61.4	59.0	95.3	51.2	65.2	64.1	94.4	98.4	66.8	75.8	63.4	192
East Nusa Tenggara	60.5	56.7	37.2	23.9	19.6	79.3	14.5	19.6	29.1	67.6	79.6	15.5	23.6	11.2	489
East Timor	45.5	45.4	19.5	13.7	13.7	53.3	3.5	18.6	21.2	49.5	63.4	13.0	14.0	14.1	120
Central Kalimantan	45.4	56.1	31.0	28.0	27.4	77.1	14.6	28.9	32.5	62.9	82.9	19.1	19.5	26.1	238
East Kalimantan	58.6	81.2	55.0	44.5	40.2	79.2	29.5	46.3	46.9	86.7	86.3	44.5	51.0	43.4	363
Central Sulawesi	45.2	68.8	28.0	14.9	13.0	86.1	4.6	10.1	10.0	77.6	86.3	18.9	21.1	6.0	270
Southeast Sulawesi	70.0	79.9	37.0	26.7	25.5	74.3	7.7	16.4	14.6	64.1	78.8	18.1	36.4	22.9	178
Maluku	65.9	83.4	40.7	33.2	25.6	68.7	14.1	18.5	18.6	69.2	79.6	18.1	21.9	18.1	235
Irian Jaya	63.0	58.4	46.4	44.2	40.8	83.3	21.9	29.6	27.1	75.5	85.6	29.2	43.5	25.3	242
<b>Total</b>	65.7	78.0	49.0	38.7	36.0	80.5	28.6	46.1	41.3	76.5	86.1	50.5	53.5	34.4	28,810

Table 4.10 Discussion of family planning with husband

Percent distribution of currently married non-sterilized women who know a contraceptive method by whether they discussed family planning with their husband in the past year, according to current age, Indonesia 1997

Age	Discussed family planning with husband		Total	Number of women
	Yes	No		
15-19	67.3	32.7	100.0	1,172
20-24	74.2	25.8	100.0	3,795
25-29	74.7	25.3	100.0	5,146
30-34	68.3	31.7	100.0	4,909
35-39	61.7	38.3	100.0	4,550
40-44	53.8	46.2	100.0	3,185
45-49	47.2	52.8	100.0	2,472
<b>Total</b>	65.4	34.6	100.0	25,229



Table 4.11 Ever use of contraception

Percentage of ever-married women and currently married women who have ever used any contraceptive method, by specific method and age, Indonesia 1997

Age	Modern method						Traditional method							Number of Women				
	Any method	Any modern method	Pill	IUD	Injec- tion	Intravag/ Diaphragm/ Foam	Female			Abortion	Any trad. method	Periodic absti- nence	With- drawal		Herbs	Massage	Other methods	
							steri- liza- tion	steri- liza- tion	Male steri- liza- tion									
EVER-MARRIED WOMEN																		
15-19	53.6	53.1	25.8	0.9	31.8	0.0	0.3	5.9	0.0	0.0	0.0	2.2	0.1	1.0	1.0	0.8	0.1	1,310
20-24	72.9	71.7	36.6	5.9	49.5	0.2	1.2	8.5	0.0	0.0	0.2	4.5	1.5	2.0	1.8	1.3	0.4	4,061
25-29	80.8	79.5	45.4	13.0	53.3	0.2	3.5	11.1	0.5	0.1	0.3	7.9	2.8	3.6	2.9	2.5	0.4	5,463
30-34	82.8	81.2	48.2	22.0	50.7	0.1	4.8	11.5	2.4	0.4	0.8	8.8	3.8	4.1	3.0	2.3	0.4	5,375
35-39	80.7	78.6	48.6	25.4	42.2	0.3	5.5	10.3	4.0	0.6	0.4	9.6	4.2	3.0	4.3	3.7	0.7	5,198
40-44	74.3	72.5	43.6	27.1	30.4	0.1	4.9	6.5	6.8	0.6	0.5	9.3	4.2	3.3	3.3	2.9	0.4	4,003
45-49	61.4	58.5	35.2	22.4	19.9	0.1	5.1	3.3	5.6	0.9	0.4	9.6	4.2	2.6	4.5	4.0	0.3	3,399
Total	75.6	73.9	42.9	18.4	42.2	0.2	4.0	8.9	2.9	0.4	0.4	8.0	3.3	3.1	3.2	2.7	0.4	28,810
CURRENTLY MARRIED WOMEN																		
15-19	53.1	52.5	25.9	0.9	31.3	0.0	0.3	6.1	0.0	0.0	0.0	2.0	0.1	0.8	1.0	0.8	0.1	1,246
20-24	73.9	72.7	37.0	6.0	50.7	0.2	1.2	8.5	0.0	0.0	0.1	4.7	1.5	2.1	1.8	1.4	0.4	3,901
25-29	82.2	80.9	46.2	13.2	54.5	0.2	3.4	11.2	0.5	0.1	0.3	8.0	2.9	3.6	2.9	2.5	0.4	5,250
30-34	84.3	82.6	49.2	22.4	51.8	0.1	4.8	11.8	2.5	0.4	0.8	9.0	3.9	4.2	3.1	2.4	0.4	5,153
35-39	82.7	80.6	50.0	26.1	43.6	0.3	5.6	10.7	4.2	0.7	0.4	10.1	4.4	3.1	4.6	3.9	0.7	4,876
40-44	77.8	76.0	45.5	28.9	32.0	0.1	4.9	7.0	7.3	0.7	0.6	9.8	4.3	3.4	3.6	3.1	0.4	3,605
45-49	65.7	62.9	37.6	24.5	22.0	0.1	5.6	3.6	6.2	0.9	0.5	10.3	4.5	2.8	4.8	4.3	0.3	2,854
Total	77.8	76.1	44.2	19.0	43.9	0.2	4.0	9.2	3.0	0.4	0.4	8.3	3.4	3.2	3.3	2.8	0.4	26,886

**Table 4.12 Number of children at first use of contraception**

Percent distribution of ever-married women by number of living children at the time of first use of contraception and median number of children at first use, according to current age, Indonesia 1997

Current age	Never used contraception	Number of living children at time of first use of contraception					Total	Number of women	Median number of children at first use of contraception
		0	1	2	3	4+			
15-19	46.4	20.6	31.8	1.2	0.0	0.0	100.0	1,310	1.2
20-24	27.1	13.9	51.3	6.8	0.8	0.0	100.0	4,061	1.4
25-29	19.2	8.6	53.0	13.6	3.9	1.6	100.0	5,463	1.6
30-34	17.2	4.3	43.9	20.2	8.9	5.5	100.0	5,375	1.8
35-39	19.3	2.2	31.3	19.9	12.4	14.8	100.0	5,198	2.3
40-44	25.7	1.2	20.8	15.9	14.7	21.6	100.0	4,003	2.9
45-49	38.6	0.6	12.7	11.3	11.2	25.6	100.0	3,399	3.5
Total	24.4	6.0	37.0	14.5	8.1	10.0	100.0	28,810	1.9

## CHAPTER 5

### CURRENT USE OF FAMILY PLANNING

Information on the current level of contraceptive use (or contraceptive prevalence) is important for measuring the success of the National Family Planning Movement. Contraceptive prevalence is defined as the proportion of currently married women age 15-49 who were using some method of family planning at the time of the survey. This chapter presents data concerning levels, trends, and differentials in current use; sources of family planning methods; age at time of first contraceptive use; accessibility; reasons for using a particular method; and some indicators of the quality of use of the pill, injection, and condom.

#### 5.1 Current Use of Family Planning

Table 5.1 shows that 57 percent of currently married women are using contraception; 55 percent use modern methods, and 3 percent use traditional methods. The prevalence of modern contraceptive use has increased by almost 3 percentage points since 1994. The 1997 contraceptive mix is slightly different from that of 1994. The most commonly used contraceptives in 1997 were injection (21 percent), the pill (15 percent), IUD (8 percent), implants (6 percent), and female sterilization (3 percent), while in 1994 they were the pill (17 percent), injection (15 percent), IUD (10 percent), implants (5 percent), and female sterilization (3 percent). Thus, injectables have replaced the pill as the most commonly used contraception.

Table 5.1 Current use of contraception

Percent distribution of ever-married women and of currently married women by contraceptive method currently used, according to age, Indonesia 1997

Age	Modern method									Traditional method				Not currently using	Total	Number of women
	Any method	Any modern method	Pill	IUD	Injection	Condom	Implants	Female sterilization	Male sterilization	Any trad. method	Periodic abstinence	Withdrawal	Other methods			
EVER-MARRIED WOMEN																
15-19	42.4	42.2	13.0	0.7	22.8	0.0	5.8	0.0	0.0	0.2	0.0	0.0	0.2	57.6	100.0	1,310
20-24	58.3	57.0	15.8	3.6	31.0	0.1	6.5	0.0	0.0	1.3	0.2	0.6	0.4	41.7	100.0	4,061
25-29	59.9	57.8	17.5	4.9	27.4	0.4	7.0	0.5	0.1	2.1	0.9	0.8	0.4	40.1	100.0	5,463
30-34	61.4	58.3	17.1	7.7	22.8	0.7	7.2	2.4	0.3	3.1	1.3	1.0	0.9	38.6	100.0	5,375
35-39	56.8	53.5	15.4	9.9	16.2	1.1	6.2	4.0	0.6	3.4	1.7	0.7	1.0	43.2	100.0	5,198
40-44	50.5	47.3	11.9	13.2	10.7	0.9	3.3	6.8	0.5	3.2	1.3	1.0	0.9	49.5	100.0	4,003
45-49	29.0	26.6	5.7	8.9	3.9	0.6	1.1	5.6	0.7	2.4	1.0	0.6	0.9	71.0	100.0	3,399
Total	53.6	51.1	14.4	7.6	19.7	0.6	5.6	2.9	0.4	2.5	1.0	0.8	0.7	46.3	100.0	28,810 <sup>1</sup>
CURRENTLY MARRIED WOMEN																
15-19	44.6	44.3	13.6	0.7	23.9	0.0	6.1	0.0	0.0	0.2	0.0	0.0	0.2	55.4	100.0	1,246
20-24	60.7	59.3	16.4	3.7	32.3	0.1	6.8	0.0	0.0	1.3	0.2	0.6	0.4	39.3	100.0	3,901
25-29	62.3	60.2	18.2	5.1	28.6	0.4	7.3	0.5	0.1	2.1	0.9	0.8	0.4	37.7	100.0	5,250
30-34	64.0	60.8	17.9	8.1	23.8	0.8	7.5	2.5	0.4	3.2	1.3	1.0	0.9	35.9	100.0	5,153
35-39	60.5	57.0	16.4	10.6	17.3	1.2	6.6	4.2	0.7	3.6	1.8	0.7	1.1	39.5	100.0	4,876
40-44	55.7	52.2	13.2	14.6	11.8	1.0	3.7	7.3	0.6	3.5	1.4	1.1	1.0	44.3	100.0	3,605
45-49	34.0	31.1	6.7	10.7	4.6	0.7	1.3	6.2	0.9	2.9	1.2	0.7	1.1	65.9	100.0	2,854
Total	57.4	54.7	15.4	8.1	21.1	0.7	6.0	3.0	0.4	2.7	1.1	0.8	0.8	42.6	100.0	26,886 <sup>1</sup>

<sup>1</sup> Total includes 5 users of intravag/diaphragm/foam.



Modern methods are popular among women of all ages. However, younger and older women are less likely to be using contraception than women in the mid-childbearing ages (20 to 39 years). Injection, the pill, and implants are more common among younger women, whereas long-term methods such as the IUD, female sterilization, and male sterilization are more commonly used by older women.

Use of family planning is slightly higher among urban women than rural women (see Table 5.2.1 and Figure 5.1). Sixty percent of currently married urban women are using a method, compared with 57 percent of rural women. The mix of methods also differs, with urban women relying more heavily on use of the IUD, female sterilization, and traditional methods. Implants, however, are more commonly used by rural women.

Table 5.2.1 Current use of contraception: background characteristics

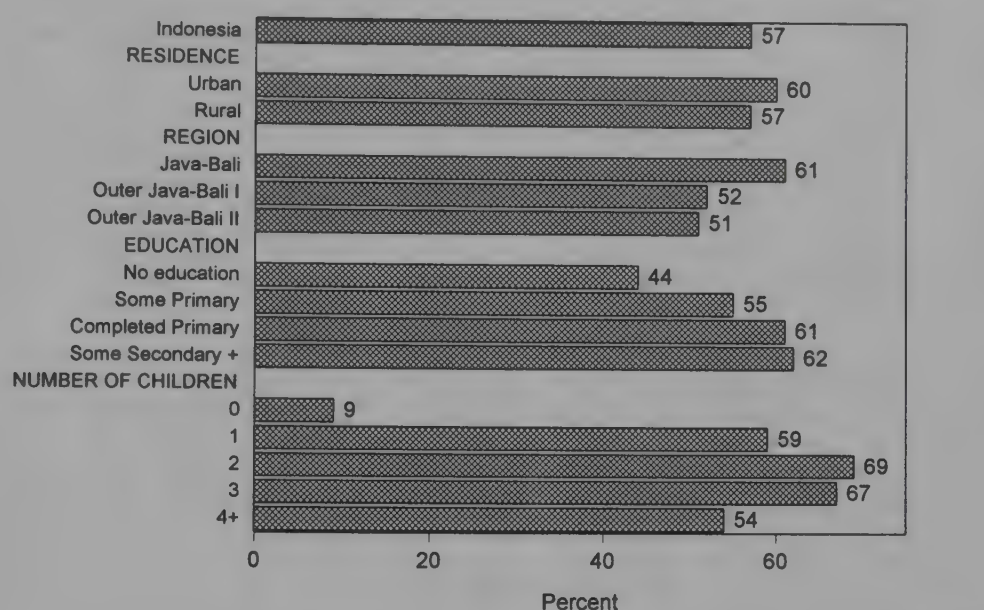
Percent distribution of currently married women by contraceptive method currently used, according to selected background characteristics, Indonesia 1997

Background characteristic	Modern method								Traditional method						Total	Number of women
	Any method	Any modern method	Pill	IUD	Injection	Condom	Implants	Female sterilization	Male sterilization	Any trad. method	Periodic abstinence	Withdrawal	Other methods	Not currently using		
<b>Residence</b>																
Urban	59.8	55.2	15.0	10.2	21.0	1.8	2.1	5.0	0.1	4.6	2.3	1.4	0.8	40.2	100.0	7,428
Rural	56.5	54.5	15.6	7.4	21.2	0.2	7.4	2.2	0.5	2.0	0.6	0.6	0.7	43.5	100.0	19,457
<b>Region/Residence</b>																
Java-Bali	60.6	58.5	14.3	10.1	23.5	0.7	6.3	3.1	0.4	2.2	0.9	0.7	0.5	39.4	100.0	16,888
Urban	61.1	57.2	14.2	11.1	22.6	1.9	2.5	4.9	0.1	3.9	2.0	1.2	0.7	38.9	100.0	5,283
Rural	60.4	59.0	14.3	9.7	23.9	0.2	8.0	2.3	0.6	1.4	0.5	0.4	0.5	39.6	100.0	11,605
Outer Java-Bali I	52.1	49.0	17.6	4.6	16.8	0.6	6.1	3.1	0.3	3.2	1.3	1.1	0.8	47.8	100.0	6,983
Urban	56.7	50.7	16.7	7.2	18.0	1.9	1.2	5.7	0.0	6.1	3.2	1.7	1.2	43.3	100.0	1,494
Rural	50.9	48.5	17.9	3.9	16.4	0.2	7.4	2.3	0.3	2.4	0.8	0.9	0.7	49.1	100.0	5,489
Outer Java-Bali II	51.3	46.9	16.9	5.0	18.3	0.5	4.0	1.9	0.3	4.4	1.6	0.8	2.0	48.7	100.0	3,014
Urban	56.0	49.6	17.1	9.8	15.6	1.3	1.3	4.2	0.2	6.4	3.0	1.8	1.6	44.0	100.0	651
Rural	50.0	46.2	16.9	3.7	19.0	0.3	4.7	1.3	0.3	3.8	1.2	0.6	2.1	50.0	100.0	2,364
<b>Education</b>																
No education	44.2	42.7	12.1	7.8	12.6	0.1	7.1	1.9	1.0	1.5	0.1	0.3	1.1	55.8	100.0	3,415
Some primary	54.7	53.1	15.4	7.7	18.4	0.3	8.1	2.7	0.5	1.7	0.4	0.5	0.8	45.3	100.0	7,304
Completed primary	60.5	58.5	17.7	6.5	24.6	0.3	6.5	2.6	0.3	2.0	0.7	0.8	0.5	39.5	100.0	8,486
Some secondary+	62.3	57.4	14.5	10.4	23.7	1.7	2.8	4.1	0.1	4.9	2.6	1.3	1.0	37.7	100.0	7,680
<b>Number of living children</b>																
0	9.3	9.2	5.5	0.0	3.2	0.1	0.3	0.2	0.0	0.1	0.0	0.1	0.0	90.7	100.0	2,361
1	59.3	57.4	16.4	5.3	28.7	0.2	6.5	0.2	0.1	1.8	0.7	0.7	0.5	40.7	100.0	6,474
2	68.9	65.7	19.0	11.1	25.7	1.1	7.0	1.5	0.3	3.2	1.4	1.1	0.7	31.1	100.0	6,625
3	66.9	63.0	17.3	11.5	20.6	1.2	7.0	4.7	0.6	3.9	1.6	1.0	1.3	33.1	100.0	4,786
4+	54.3	51.3	13.2	8.4	16.0	0.5	5.7	6.9	0.7	3.0	1.2	0.8	1.0	45.7	100.0	6,640
<b>Total</b>	57.4	54.7	15.4	8.1	21.1	0.7	6.0	3.0	0.4	2.7	1.1	0.8	0.8	42.6	100.0	26,886 <sup>1</sup>

<sup>1</sup> Total includes 5 users of intravag/diaphragm/foam.

Contraceptive use increases with the respondent's level of education. Forty-four percent of currently married women with no education are using a method, compared with 62 percent of women with secondary or higher education. The type of contraceptive being used also varies by the women's level of education. While IUD, injection, and female sterilization are more commonly used by women who have secondary education or higher, women with no education are more likely to use implants and male sterilization.

**Figure 5.1**  
**Percentage of Currently Married Women Age 15-49**  
**Who Are Using a Contraceptive Method**



IDHS97

Contraceptive use increases rapidly with the number of living children a woman has. It reaches a peak of 69 percent for women with two children, and declines for women with four or more children. Nine percent of childless women are using a method of family planning, mostly the pill, presumably to delay their first birth. After having one child, women tend to use injection, the pill, and implants. Use of female sterilization increases with the number of living children.

Table 5.2.2 shows the proportion of married women who are using contraception by province in each of the three regions. Contraceptive use is highest in Java-Bali (61 percent), followed by Outer Java-Bali I (52 percent), and Outer Java-Bali II (51 percent). In the region of Java-Bali, DI Yogyakarta has the highest prevalence rate (73 percent), followed by Bali (68 percent). Within Outer Java-Bali I, contraceptive use is highest in North Sulawesi (71 percent) and lowest in Dista Aceh (37 percent). The highest level of contraceptive use in Outer Java-Bali II is in Bengkulu (67 percent), and the lowest is in East Timor (27 percent).

There are major differentials in the use of modern contraception within regions. In Java-Bali, modern contraceptive use ranges from 66 percent in Bali to 54 percent in DKI Jakarta. In Outer Java-Bali I, use of modern methods is highest in Lampung (65 percent) and lowest in Dista Aceh (36 percent). The highest level of modern contraceptive use is in Outer Java-Bali II is in Bengkulu (62 percent), and the lowest is in East Timor (25 percent).

## 5.2 Trends in Contraceptive Use

The dramatic changes that have taken place in the level and pattern of contraceptive use in Indonesia over the past 20 years are demonstrated in Tables 5.3 to 5.5. Table 5.3 and Figure 5.2 focus on the provinces that comprise the Java-Bali region, for which it is possible to construct comparable estimates of contraceptive prevalence over the 21-year period from 1976 to 1997. Overall, prevalence doubled in Java-



Table 5.2.2 Current use of contraception: region and province

Percent distribution of currently married women by contraceptive method currently used, according to region and province, Indonesia 1997

Region and province	Modern method								Traditional method					Not currently using	Total	Number of women
	Any method	Any modern method	Pill	IUD	Injection	Condom	Implants	Female sterilization	Male sterilization	Any trad. method	Periodic abstinence	Withdrawal	Other methods			
<b>Java-Bali</b>	60.6	58.5	14.3	10.1	23.5	0.7	6.3	3.1	0.4	2.2	0.9	0.7	0.5	39.4	100.0	16,877
DKI Jakarta	58.9	53.9	13.8	10.8	22.2	2.0	0.8	4.2	0.1	5.0	2.9	0.9	1.1	41.1	100.0	1,043
West Java	57.6	56.5	15.9	5.9	26.3	0.4	5.5	1.8	0.7	1.1	0.7	0.1	0.3	42.4	100.0	5,395
Central Java	62.4	61.4	11.1	8.7	25.4	1.0	11.2	3.4	0.6	1.0	0.6	0.4	0.1	37.6	100.0	4,362
DI Yogyakarta	72.9	63.7	10.5	23.4	19.5	2.4	2.5	4.6	0.5	9.2	3.4	4.3	1.5	27.1	100.0	412
East Java	61.1	58.0	16.4	12.6	20.1	0.5	4.8	3.4	0.2	3.1	0.8	1.3	1.0	38.9	100.0	5,244
Bali	68.1	66.2	5.6	33.9	16.9	0.7	0.6	7.9	0.4	1.9	1.4	0.3	0.3	31.9	100.0	422
<b>Outer Java-Bali I</b>	52.1	49.0	17.6	4.6	16.8	0.6	6.1	3.1	0.3	3.2	1.3	1.1	0.8	47.8	100.0	7,004
Dista Aceh	37.1	36.3	14.9	1.5	17.8	0.3	1.4	0.5	0.0	0.8	0.2	0.0	0.5	62.9	100.0	521
North Sumatra	46.0	42.0	13.2	4.4	14.0	1.0	2.8	6.3	0.2	4.0	1.9	1.3	0.8	54.0	100.0	1,584
West Sumatra	44.8	41.8	8.6	8.4	18.2	0.7	3.8	2.1	0.0	3.0	1.3	1.3	0.4	55.2	100.0	498
South Sumatra	57.9	54.8	15.8	3.0	21.2	0.9	9.4	4.3	0.0	3.1	2.0	0.7	0.3	42.1	100.0	875
Lampung	66.5	64.7	23.3	6.9	19.9	0.5	11.0	1.5	1.6	1.8	0.9	0.4	0.5	33.5	100.0	889
West Nusa Tenggara	56.5	54.3	13.7	6.5	16.8	0.4	15.3	1.7	0.0	2.1	0.4	0.4	1.3	43.5	100.0	528
West Kalimantan	58.1	55.4	26.4	2.1	22.2	0.4	2.2	1.8	0.5	2.7	0.9	0.1	1.7	41.9	100.0	443
South Kalimantan	60.2	58.5	38.1	2.0	12.2	0.3	3.6	2.4	0.0	1.6	0.4	0.1	1.1	39.8	100.0	386
North Sulawesi	71.2	63.5	22.1	14.2	15.6	0.1	9.7	1.7	0.0	7.7	3.8	0.7	3.2	28.8	100.0	326
South Sulawesi	41.5	36.7	15.8	2.0	12.7	0.3	3.8	2.0	0.0	4.8	0.7	3.5	0.6	58.5	100.0	955
<b>Outer Java-Bali II</b>	51.3	46.9	16.9	5.0	18.3	0.5	4.0	1.9	0.3	4.4	1.6	0.8	2.0	48.7	100.0	3,003
Riau	48.0	44.1	16.9	3.3	18.8	1.2	1.4	2.4	0.2	3.8	1.0	1.9	0.9	52.0	100.0	452
Jambi	61.8	60.3	28.4	8.1	19.3	0.5	3.3	0.7	0.0	1.4	0.7	0.5	0.2	38.2	100.0	382
Bengkulu	66.6	62.3	18.6	8.3	20.0	0.9	12.4	1.7	0.4	4.3	1.8	1.9	0.7	33.4	100.0	177
East Nusa Tenggara	39.3	35.2	4.4	5.3	19.3	0.0	3.0	2.2	1.0	4.1	2.7	1.1	0.2	60.7	100.0	448
East Timor	26.7	25.1	1.9	1.8	17.7	0.0	2.4	1.2	0.0	1.6	1.2	0.0	0.4	73.3	100.0	116
Central Kalimantan	63.3	57.0	34.3	0.1	20.4	0.1	1.6	0.5	0.0	6.3	0.4	0.1	5.8	36.7	100.0	219
East Kalimantan	59.3	54.5	24.3	9.6	14.0	1.2	2.2	3.1	0.2	4.8	2.6	0.3	1.8	40.7	100.0	340
Central Sulawesi	51.7	50.2	18.1	3.6	20.5	0.1	6.7	1.2	0.0	1.5	0.7	0.2	0.6	48.3	100.0	252
Southeast Sulawesi	53.1	46.7	14.0	2.6	17.2	0.3	11.0	1.4	0.2	6.4	3.4	2.6	0.4	46.9	100.0	163
Maluku	40.1	36.1	9.9	4.0	17.0	0.0	3.5	1.4	0.3	4.0	1.7	0.0	2.4	59.9	100.0	222
Irian Jaya	50.4	38.3	8.7	4.1	17.1	0.5	3.9	3.8	0.2	12.1	1.3	0.3	10.6	49.6	100.0	233
<b>Total</b>	<b>57.4</b>	<b>54.7</b>	<b>15.4</b>	<b>8.1</b>	<b>21.1</b>	<b>0.7</b>	<b>6.0</b>	<b>3.0</b>	<b>0.4</b>	<b>2.7</b>	<b>1.1</b>	<b>0.8</b>	<b>0.8</b>	<b>42.6</b>	<b>100.0</b>	<b>26,886<sup>1</sup></b>

<sup>1</sup> Total includes 5 users of intravag/diaphragm/foam.

Bali between 1976 and 1994 from 26 percent to 51 percent. However, from 1987 to 1991, the percentage of married women using family planning in Java-Bali increased only slightly (from 51 to 53 percent); between 1991 and 1994, the rate increased from 53 to 58 percent, and between 1994 and 1997 the rate increased from 58 percent to 61 percent. The largest increase in Java-Bali between 1994 and 1997 occurred in East Java (5 percentage points). Contraceptive prevalence has remained at the same level as in 1994 in Bali but has declined slightly in DKI Jakarta.

Table 5.4 and Figure 5.3 show trends in use of specific methods in Java-Bali. Figure 5.3 shows findings from the 1976 IFS, 1987 NICPS and 1997 IDHS. Injection use has increased considerably, especially during the 1994-1997 period when it increased from 17 percent to 24 percent. The use of female sterilization and implants increased somewhat, but has recently hit a plateau, while the use of the pill decreased from 17 percent to 14 percent and the use of IUD from 12 percent to 10 percent. Use of the condom and male sterilization remained limited (under 1 percent). The most significant increase is in the prevalence of the implants, from less than half a percent in 1987 to 3 percent in 1991 and 6 percent in 1997.

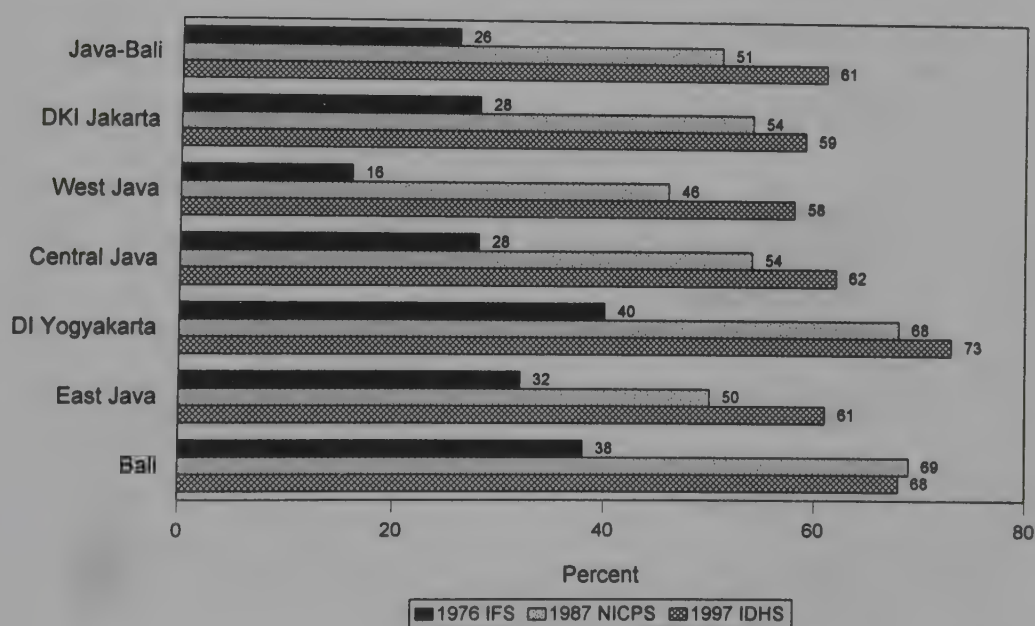


**Table 5.3 Trends in contraceptive use by province: Java-Bali 1976-1997**

Percentage of currently married women who are currently using a method of contraception, by province, Java-Bali, 1976-1997

Province	IFS 1976	NICPS 1987	IDHS 1991	IDHS 1994	IDHS 1997	Ratio 1991/ 1987	Ratio 1994/ 1991	Ratio 1997/ 1994
DKI Jakarta	28	54	56	60	59	1.04	1.07	0.98
West Java	16	46	51	57	58	1.11	1.12	1.02
Central Java	28	54	50	61	62	0.93	1.22	1.02
DI Yogyakarta	40	68	71	70	73	1.04	0.99	1.04
East Java	32	50	55	56	61	1.10	1.02	1.09
Bali	38	69	72	68	68	1.04	0.94	1.00
Total	26	51	53	58	61	1.04	1.09	1.05

**Figure 5.2**  
**Percentage of Currently Married Women Age 15-49**  
**Using Contraception, by Province, Java-Bali 1976-1997**



IDHS97

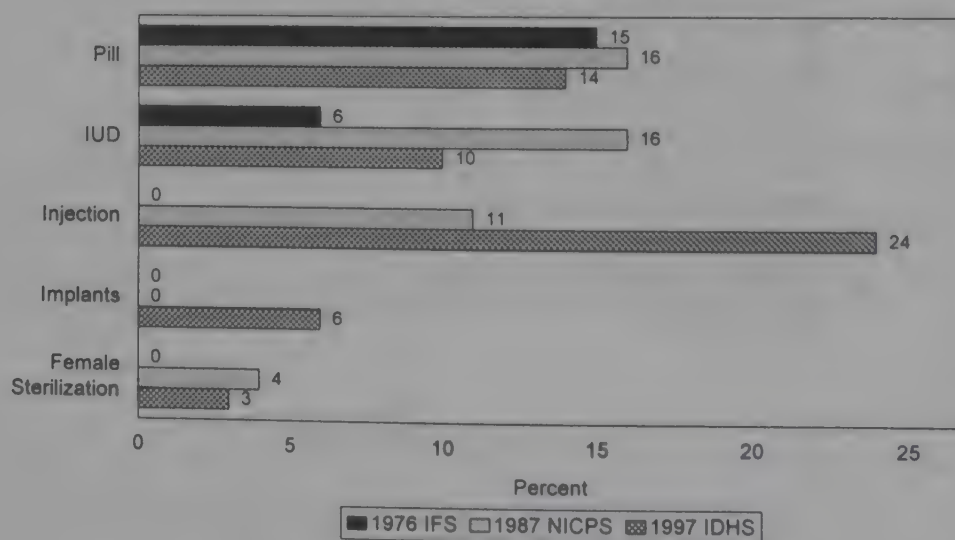
Table 5.5 and Figure 5.4 show the percentage of married women in Indonesia using contraception in the 1991, 1994, and 1997 surveys. The overall prevalence was 50 percent in 1991, 55 percent in 1994, and 57 percent in 1997. The use of injection increased rapidly from 12 percent in 1991 to 21 percent in 1997. On the other hand, the use of IUD decreased from 13 percent in 1991 to 10 percent in 1994, and to 8 percent in 1997. While the use of female sterilization has remained constant, the use of the pill, condom, and male sterilization appears to have increased during the period of 1991-1994, but to have decreased during the period 1994-1997.

Table 5.4 Trends in use of specific contraceptive methods: Java-Bali, 1976-1997

Percentage of currently married women who are currently using a specific contraceptive method, by method, Java-Bali, 1976-1997

Method	IFS 1976	NICPS 1987	IDHS 1991	IDHS 1994	IDHS 1997
Any method	26.3	50.9	53.4	58.4	60.6
Pill	14.9	16.0	14.5	16.7	14.3
IUD	5.6	15.5	16.1	12.1	10.1
Injection	0.2	10.7	13.0	16.8	23.5
Condom	1.8	1.8	0.8	0.9	0.7
Female sterilization	0.3	3.5	2.9	3.5	3.1
Male sterilization	0.0	0.2	0.7	0.9	0.4
Implants	-	0.4	3.1	5.5	6.3
Periodic abstinence	0.8	1.1	1.0	0.7	0.9
Withdrawal	0.3	0.7	0.5	0.6	0.7
Other	2.3	2.3	0.6	0.6	0.5
Number of women	7,974	7,265	13,419	16,663	16,888

Figure 5.3  
Percentage of Currently Married Women Age 15-49  
Using Specific Modern Contraceptive Methods  
Java-Bali, 1976-1997



### 5.3 Contraceptive Use Among Women Over 30 and Among Those With Three or More Children

One of the principles of the family planning movement is that women over 30 and those with three or more children should be using the most effective means of fertility control available. Table 5.6 presents information which can be used to evaluate the success of the program in meeting these goals. In Table 5.6, long-term methods include female and male sterilization, IUD, and implants.

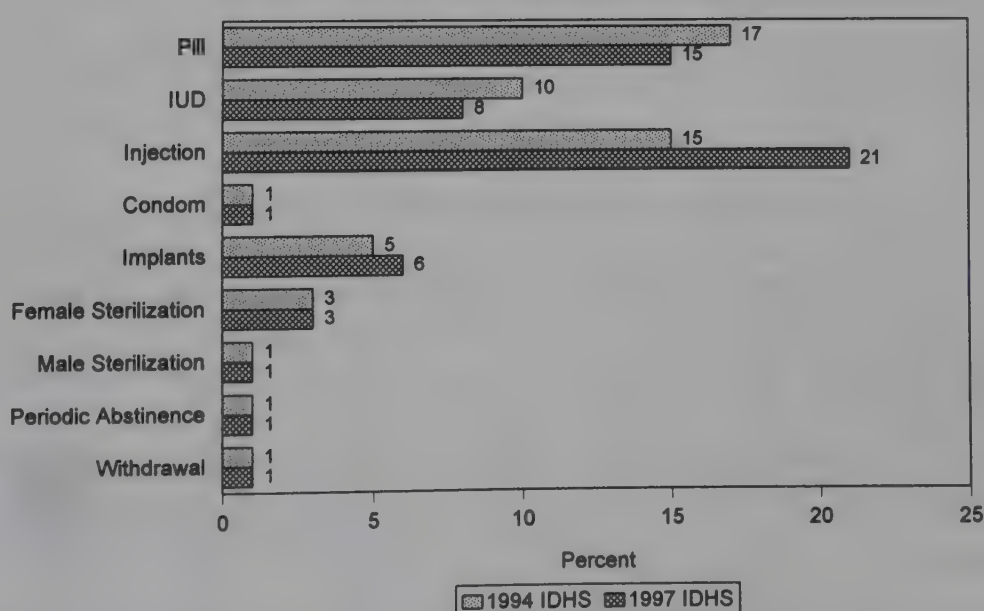
**Table 5.5 Trends in use of specific contraceptive methods: Indonesia, 1991-1997**

Percentage of currently married women who are currently using a specific contraceptive method, by method, Indonesia 1991-1997

Method	IDHS 1991	IDHS 1994	IDHS 1997
<b>Any method</b>	49.7	54.7	57.4
Pill	14.8	17.1	15.4
IUD	13.3	10.3	8.1
Injection	11.7	15.2	21.1
Condom	0.8	0.9	0.7
Implants	3.1	4.9	6.0
Female sterilization	2.7	3.1	3.0
Male sterilization	0.6	0.7	0.4
Periodic abstinence	1.1	1.1	1.1
Withdrawal	0.7	0.8	0.8
Other	0.9	0.8	0.8
Number of women	21,109	26,186	26,886

Table 5.6 shows that 24 percent of married women have never used a modern contraception, 21 percent used modern methods in the past, and 55 percent are currently using modern contraceptives. About 48 percent of all women age 20-24 years and 47 percent of those age 25-29 are using long-term methods. Long-term methods are also used by 42 percent of women age 30-34. Thus, long-term contraceptives are being used by both younger and older women, regardless of the number of children they have. The use of long-term methods among younger women with one or two children is higher than that recorded in 1994. Temporary methods are commonly used by women age 30 or higher with three or more children.

**Figure 5.4**  
**Percentage of Currently Married Women**  
**Age 15-49 Using Specific Contraceptive Methods,**  
**Indonesia, 1994 and 1997**



## 5.4 Reasons for Choice of Contraceptive Method

The reasons women give for choosing their current contraceptive method are important for the family planning movement, particularly in view of the current emphasis on a program of self-sustainability. As shown in Table 5.7, side effects of other methods (27 percent), convenience (22 percent), and the desire for a more effective method (18 percent), are the most common reasons given for having chosen a specific method.



**Table 5.6 Contraceptive use status and type of method used**

Percent distribution of currently married women by contraceptive use status, and among current users of modern methods, the type of method used (temporary or long-term) by number of living children, according to current age, Indonesia 1997

Current age	Percentage who never used modern method	Percentage who used modern method in the past	Percentage who are currently using a modern method by number of living children					Total	Number of women
			0	1-2		3+			
			Any modern method	Temporary method	Long-term method <sup>1</sup>	Temporary method	Long-term method <sup>1</sup>		
15-19	47.5	8.2	10.7	6.4	27.2	0.0	0.0	100.0	1,246
20-24	27.3	13.3	1.4	10.1	46.4	0.4	1.1	100.0	3,901
25-29	19.1	20.7	0.4	10.4	38.0	2.5	8.8	100.0	5,250
30-34	17.4	21.8	0.0	9.1	21.9	9.3	20.5	100.0	5,153
35-39	19.4	23.7	0.1	6.8	10.0	15.2	24.8	100.0	4,876
40-44	24.0	23.7	0.0	5.4	4.6	20.8	21.5	100.0	3,605
45-49	37.1	31.8	0.0	3.1	1.5	16.0	10.6	100.0	2,854
Total	23.9	21.4	0.8	7.8	22.2	9.6	14.3	100.0	26,886

<sup>1</sup> Long-term methods include female and male sterilization, the IUD, and implants.

**Table 5.7 Reasons for using current method of contraception**

Percent distribution of contraceptive users by main reason for deciding to use current contraceptive method, according to specific method, Indonesia 1997

Reason for using current method	Method						Female sterilization	Male sterilization	Total
	Pill	IUD	Injection	Condom	Implants				
Recommended by FP worker	6.7	17.2	5.1	9.3	12.7	15.4	27.2	9.0	
Recommended by friend/relative	4.7	4.0	3.9	0.3	5.0	4.0	0.3	4.2	
Side effects of other methods	36.3	18.7	27.6	53.2	17.3	11.7	18.8	27.0	
Convenience	13.3	23.9	27.9	4.6	28.0	11.8	2.4	21.8	
Access, availability	13.3	2.2	3.8	14.0	2.2	0.1	0.4	6.0	
Lower cost	11.4	3.1	1.4	0.2	7.1	0.2	2.4	5.0	
Want permanent method	1.0	9.0	2.4	0.3	7.4	33.1	11.9	5.3	
Husband preferred.	1.0	0.6	1.6	9.1	1.0	1.8	19.4	1.5	
Want more effective method	10.5	18.2	23.3	7.7	16.8	18.5	7.1	17.7	
Other	1.7	2.6	2.0	1.3	1.7	3.1	6.3	2.1	
Don't know	0.1	0.4	1.0	0.0	0.9	0.4	3.7	0.6	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Number	4,153	2,191	5,687	179	1,601	826	102	14,736	

Note: Total includes some users of other methods not shown separately.

As might be expected, reasons for using a specific method vary according to the method. The majority (53 percent) of condom users stated that they chose the method because it had fewer side effects than other methods. This reason is also commonly stated by pill and injection users (36 and 28 percent,

respectively). Among IUD and injection users, 18 percent and 23 percent, respectively, chose their method because it was considered more effective than other methods, while 28 percent of implants and injection users said that convenience was the main reason for choosing their method.

Substantial proportions of pill users (11 percent) and implants users (7 percent) said they chose their method because it was affordable—a large proportion of implants users receive their method free of charge (see Table 5.13). One in three sterilized women (35 percent) said that they chose this method because they wanted a permanent method, while 19 percent stated that they wanted a more effective method.

## 5.5 Quality of Use of Pill, Injection, and Condoms

Since the pill is one of the most popular methods of contraception in Indonesia, it is important for program managers to find out whether the method is used properly. For that purpose, the 1997 IDHS included a series of questions on the availability of a pill package in the house at the time of the survey, the brand name, and when the user last took a pill.

Table 5.8.1 indicates that 91 percent of pills users were able to show a package to the interviewer, 85 percent had the pills taken in order, and 83 percent of pill users said they had taken a pill in the 2 days preceding the interview. This means that about 17 percent of pill users are not fully protected from the risks of pregnancy. Table 5.8.1 also shows that there are no significant differences in the quality of pill use according to selected characteristics, except by age. There is a negative relationship between the quality of pill use and age; older women are less likely to have take a pill in the last 2 days than younger women.

The variability of pill compliance among regions and provinces is shown in Table 5.8.2. Provinces in which small proportions of respondents were able to show pill packages are Central Java (81 percent), and Irian Jaya (82 percent). Provinces with the highest percentages (95 percent or higher) include South Kalimantan, Bali, Lampung, Jambi, and DKI Jakarta. The proportion of women who took a pill in the prior 2 days is highest in Dista Aceh (89 percent).

All pill users were asked about the brand of pill they used. Table 5.9 shows that the most popular brand of pill is Nordette 28 (23 percent), Microgynon-Schering (16 percent), and Microgynon 30 ED (11 percent). Other brands that have a sizable number of users are Microgynon Kimia Farma (9 percent), Marvelon 28 (8 percent), Exluton (7 percent), and Blue Circle Microgynon (7 percent). Many other brands were reported, but each was reported by very few women and hence were grouped together.

Table 5.9 also shows condom brands used by respondents. Two brands were used widely. They are BKKBN (21 percent) and Dua Lima (20 percent). Other brands were also mentioned by respondents, but each was used by too few women to be presented separately.

In addition to the quality of pill and condom uses, the 1997 IDHS also investigated the quality of injection use. Interviewers asked all injection users the date of their last injection. Table 5.10 shows that 99 percent of injection users received an injection less than three months before the survey. This means that only one percent of injection users may actually be at risk of pregnancy. The variability in the quality of injection use by background characteristics, region, and province are very small.

## 5.6 Problems With Current Method

All contraceptive users in the 1997 IDHS were asked whether they had experienced any health problems or any other problems with the method they were using. Table 5.11 shows that the vast majority of contraceptive users did not have any health- or nonhealth-related problems in using the methods.



**Table 5.8.1 Pill use compliance: background characteristics**

Percentage of currently married women using the pill, and the percentage of pill users who could show pill packet, who took pills in order, and who took a pill less than two days ago, by background characteristics, Indonesia 1997

Background characteristic	Percent using pill	Percentage of pill users who:			Number of pill users
		Could show pill packet	Took pills in order	Took pill < 2 days ago	
<b>Age</b>					
15-19	13.6	94.1	87.3	82.1	170
20-24	16.4	89.3	86.1	87.3	642
25-29	18.2	92.4	84.8	83.5	953
30-34	17.9	91.4	85.1	83.9	920
35-39	16.4	89.8	83.4	79.8	800
40-44	13.2	90.6	82.3	78.6	475
45-49	6.7	92.8	83.0	75.7	192
<b>Residence</b>					
Urban	15.0	89.4	83.5	82.0	1,112
Rural	15.6	91.7	84.9	82.7	3,041
<b>Region/Residence</b>					
Java-Bali	14.3	89.8	81.6	82.2	2,411
Urban	14.2	87.5	80.7	82.1	750
Rural	14.3	90.7	82.0	82.2	1,661
Outer Java-Bali I	17.6	93.7	89.2	83.4	1,231
Urban	16.7	95.0	91.7	82.1	251
Rural	17.9	93.3	88.5	83.7	980
Outer Java-Bali II	16.9	91.0	87.1	81.7	511
Urban	17.1	88.8	83.8	80.4	111
Rural	16.9	91.6	88.0	82.1	400
<b>Education</b>					
No education	12.1	90.0	85.9	83.7	415
Some primary	15.4	89.5	83.2	79.8	1,119
Completed primary	17.7	91.3	84.3	83.9	1,498
Some secondary +	14.5	92.7	85.8	83.0	1,120
<b>Total</b>	<b>15.4</b>	<b>91.1</b>	<b>84.5</b>	<b>82.5</b>	<b>4,153</b>

The proportion of users who experienced health problems is slightly higher among users of hormonal methods than among users of other methods. This is shown by the lower percentages who reported no health problems among injection users (78 percent) and implants users (82 percent). The most common health problem among users of injection and implants is lack of menstruation, while for women who use the pill, the most common problem is headaches.

## 5.7 Cost and Accessibility of Methods

The Indonesian national family planning movement is implemented by the government with active involvement and participation of the community and private sectors. One of the indicators of community participation in the program is self-sustainability, measured by the proportion of users who pay for the methods and services. All women who used contraceptives were asked where they obtained the method the last time and how much was they paid for it (i.e., the cost for the method and for services).



**Table 5.8.2 Pill use compliance: region and province**

Percentage of currently married women using the pill, and the percentage of pill users who could show pill packet who took pills in order, and who took a pill less than two days ago, by region and province, Indonesia 1997

Region and province	Percent using pill	Percentage of pill users who:			Number of pill users
		Could show pill packet	Took pills in order	Took pill < 2 days ago	
<b>Java-Bali</b>	14.3	89.8	81.6	82.2	2,411
DKI Jakarta	13.8	95.1	87.3	86.0	145
West Java	15.9	92.4	81.9	83.0	859
Central Java	11.1	80.8	76.4	77.6	485
DI Yogyakarta	10.5	87.0	83.0	82.7	43
East Java	16.4	91.2	83.0	83.3	855
Bali	5.6	96.0	90.8	83.7	24
<b>Outer Java-Bali I</b>	17.6	93.7	89.2	83.4	1,231
Dista Aceh	14.9	94.8	92.2	89.0	77
North Sumatra	13.3	93.9	89.4	73.2	208
West Sumatra	8.5	89.2	85.5	80.0	43
South Sumatra	15.8	92.5	89.1	84.0	138
Lampung	23.3	96.1	88.8	84.1	205
West Nusa Tenggara	13.7	93.4	87.9	86.8	72
West Kalimantan	26.4	91.5	89.3	84.7	117
South Kalimantan	38.1	97.1	90.1	86.5	148
North Sulawesi	22.1	90.4	87.3	84.8	73
South Sulawesi	15.8	91.9	89.1	87.5	149
<b>Outer Java-Bali II</b>	16.9	91.0	87.1	81.7	511
Riau	16.9	92.4	83.1	84.8	76
Jambi	28.4	96.1	94.2	78.2	108
Bengkulu	18.6	94.9	86.1	83.7	34
East Nusa Tenggara	(4.4)	(87.1)	(87.1)	(75.7)	20
East Timor	*	*	*	*	2
Central Kalimantan	34.3	90.1	88.1	87.1	76
East Kalimantan	24.3	90.1	84.7	78.4	84
Central Sulawesi	18.1	89.4	87.6	86.5	45
Southeast Sulawesi	14.0	86.1	81.6	81.4	24
Maluku	9.9	85.7	85.7	83.3	22
Irian Jaya	8.7	81.7	81.7	75.9	20
<b>Total</b>	15.4	91.1	84.5	82.5	4,153

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 5.12 shows that 43 percent of users obtained services from a government outlet, and most of them (32 percent) paid for the services and methods. Forty-two percent of users obtained their services from the private sector; almost all of these paid for their method and services. Fifteen percent of users obtained the method and services from other sources such as village birth delivery posts (polindes), integrated health posts (posyandu), family planning posts, village contraceptive distribution centers (VCDC), traditional birth attendants, and friends. The majority of these users also paid for family planning methods and services.

Table 5.9 Use of pill and condom brands

Percent distribution of currently married pill users and condom users by pill/condom brand used, Indonesia 1997

Pill/condom brand	Percent	Number of users
<b>Pill</b>		
Microgynon 30 ED	11.1	458
Microgynon 50 ED	2.1	86
Microgynon (Schering)	16.4	682
Blue Circle Microgynon	6.9	286
Marvelon 28	8.3	342
Nordette 28	22.9	953
Exluton	7.4	307
Microgynon (Kimia Farma)	9.4	392
Other	14.2	588
Don't know	(1.4)	59
Total	100.0	4,153
<b>Brand of condom</b>		
BKKBN	20.7	37
Dua Lima	20.4	37
Other	48.9	78
Don't know	*	27
Total	100.0	179

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

In total, 84 percent of users pay for their contraceptives, and only 16 percent receive free services. Injection users are the most likely to pay for their contraception (97 percent), with pill users close behind (92 percent). Self-sustainability is much lower for the IUD, with only 53 percent of users paying for their method. The level of self-sustainability in 1997 is slightly higher than that in 1994.

As expected, the level of self-sustainability is lowest in Outer Java-Bali II (78 percent), whereas in Java-Bali and Outer Java-Bali I the level is 85 percent and 84 percent, respectively. Among the provinces in Java-Bali, the highest level of self-sustainability is in DKI Jakarta (90 percent), followed by West Java (89 percent), and Bali (88 percent).

Table 5.13 shows the percentage of current users using specific types of sources who get their methods free, and the mean cost of the methods for those who pay. Overall, the 1997 IDHS shows that although those who rely on government sources are much more likely to get free services (26 percent) than those who use private sources (5 percent), those who pay for their methods pay more at a government source than at a private source (Rp.21,216 compared with Rp. 19,813). This pattern differs from that

observed in the 1994 IDHS, in which contraceptive users who obtained their method from a government source paid, on average, half the cost of the same method obtained from a private sector source. Excluding costs for female sterilization, contraceptive users who obtained the method from a private source actually paid, on average, two and a half times more than those who obtained the method from a government source. On average, all contraceptive methods obtained from a government source are cheaper than those obtained from a private source.

The difference in the mean cost varies by method and source of services. By method, the cost of female sterilization is highest both in government or private sources; the cost of the pill is lowest. IUD users who obtain their method from a government source pay much less than those who obtain the method from a private source (Rp.6,345 compared with Rp. 37,328). The cost of injection is almost the same between government and private source, around Rp. 4,000. However, the cost of implants from a private source is almost twice as much as that from a government source (Rp. 13,175 compared with Rp.7,148).

## 5.8 Source of Method

Information concerning sources of contraceptives is important for family planning program administrators since the family planning movement is currently directed toward self-sustainability and greater use of the private sector. Table 5.14 shows users rely almost equally on government sources (43 percent) and medical private sources (42 percent). Fifteen percent of users obtained their methods from other



**Table 5.10 Use of injection**

Percentage of currently married women using injection, and the percentage of injection users who received an injection in the last three months, by background characteristics, Indonesia 1997

Background characteristic	Percent using injection	Injection users	
		Percent who received injection < 3 months ago	Number of injection users
<b>Age</b>			
15-19	23.9	100.0	297
20-24	32.3	99.0	1,261
25-29	28.6	98.0	1,500
30-34	23.8	99.2	1,227
35-39	17.3	98.6	843
40-44	11.8	98.1	428
45-49	4.6	95.6	132
<b>Residence</b>			
Urban	21.0	98.1	1,562
Rural	21.2	98.8	4,126
<b>Region/Residence</b>			
Java-Bali	23.5	98.8	3,964
Urban	22.6	98.4	1,193
Rural	23.9	99.1	2,771
Outer Java-Bali I	16.8	98.1	1,171
Urban	18.0	97.2	267
Rural	16.4	98.3	904
Outer Java-Bali II	18.3	98.1	552
Urban	15.6	97.9	102
Rural	19.0	98.1	451
<b>Education</b>			
No education	12.6	99.0	432
Some primary	18.4	98.1	1,344
Completed primary	24.6	99.2	2,090
Some secondary +	23.7	98.2	1,821
Total	21.1	98.6	5,687

sources such as *posyandu*, *polindes*, and VCDC. As shown in Figure 5.5, use of government sources decreased from 49 percent in 1994 to 43 percent in 1997, while use of medical private sources increased from 28 to 42 percent, and use of other sources decreased from 23 to 15 percent. The substantial increase in use of private sources is mainly due to the increased use of private midwives (12 percentage points).

Figure 5.6 shows that most of the women who obtain their family planning method through the government sector, obtained it from health centers (31 percent). Among private sources, private midwives are the most popular (28 percent), and among other sources, *posyandu* is the primary choice for family planning services (7 percent).



**Table 5.11 Problems with current method of contraception**

Percent distribution of current users of modern contraceptive methods by the main health problem with the method and by other nonhealth problem with the method, according to specific methods, Indonesia 1997

Main problem with current method	Method						Female sterilization	Male sterilization
	Pill	IUD	Injection	Condom	Implants			
<b>Health problem</b>								
No health problem	89.7	93.8	78.1	100.0	81.6	90.4	98.0	
Weight gain	0.8	0.3	2.6	0.0	1.5	0.6	0.0	
Weight loss	0.2	0.1	0.3	0.0	0.2	0.0	0.0	
Bleeding	0.1	1.4	0.8	0.0	0.9	0.8	0.0	
Hypertension	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
Headache	5.9	0.7	4.6	0.0	3.8	2.6	0.0	
Nausea	1.2	1.4	0.4	0.0	0.1	0.7	0.0	
Amenorrhea	1.0	0.4	11.6	0.0	9.7	0.9	0.0	
Weak/tired	0.2	0.2	0.5	0.0	0.3	1.1	1.4	
Other	0.8	1.7	1.1	0.0	1.8	2.6	0.6	
Don't know								
<b>Total</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
<b>Other problem</b>								
No other problem	99.1	99.2	98.4	94.5	98.9	98.0	99.6	
Any other problem	0.9	0.8	1.5	5.5	1.1	2.0	0.4	
<b>Total</b>	100.0	99.8	100.0	100.0	100.0	100.0	100.0	
<b>Number</b>	4,153	2,191	5,687	179	1,601	826	102	

Note: Total includes some users of other methods not shown separately.

The source of family planning varies by method. The majority of sterilized women had the operation in a government hospital. Public health centers provide half of implants and IUD insertions. Pill users, on the other hand, obtain their pills from health centers (24 percent), private midwives (19 percent), and integrated health posts (16 percent).

Private sources play a significant role in providing certain methods, especially injection and condom. One out of two users of injection obtain it from a private midwife, while 70 percent of condom users get their supply from a pharmacy or a drugstore.

As part of the family planning movement strategy, programs continue to be developed in enhancing the accessibility and availability of family planning services in order to reach the remote areas, and to provide users with better quality services. However, people select the place where they get family planning services for various reasons. The place selected may be more convenient or give better or cheaper services. In the 1997 IDHS, data on satisfaction with source of supply were obtained by asking current users to mention the main reason they went to the place rather than to some other sources. Table 5.15.1 and Figure 5.7 show that more than half (56 percent) of current users selected the source of supply because of its proximity to their home. Other reasons commonly cited are affordability (9 percent), availability of transportation (6 percent), competency of staff (5 percent), and use other services at the same facility (4 percent).

**Table 5.12 Payment for contraceptive methods and services**

Percent distribution of current users of modern contraceptive methods by source of method and whether method is free or respondent pays for it, according to method and region, Indonesia 1997

Method/Region	Source of contraceptive method and method of payment						Total	Number of women
	Government		Private		Other			
	Free	Pay	Free	Pay	Free	Pay		
<b>Method</b>								
Pill	3.1	30.6	1.4	30.6	3.6	30.7	100.0	4,153
IUD	35.9	24.3	5.8	26.3	5.5	2.2	100.0	2,185
Injection	1.4	29.8	0.9	60.4	0.5	7.0	100.0	5,685
Condom	6.5	9.7	6.0	69.7	4.7	3.5	100.0	180
Implants	26.3	45.1	2.5	14.2	4.6	7.2	100.0	1,602
Female sterilization	22.4	47.6	6.1	23.3	0.5	0.0	100.0	825
<b>Region</b>								
Java-Bali	10.4	29.4	2.1	43.5	2.6	12.1	100.0	9,808
DKI Jakarta	6.1	20.3	3.1	67.6	1.1	1.8	100.0	564
West Java	7.9	28.8	1.7	50.7	1.4	9.5	100.0	3,013
Central Java	12.8	33.0	1.9	39.5	3.8	9.0	100.0	2,656
DI Yogyakarta	21.0	26.3	2.9	38.5	5.8	5.6	100.0	261
East Java	10.6	28.0	2.3	35.5	2.9	20.8	100.0	3,036
Bali	9.4	39.7	2.3	47.7	0.1	0.8	100.0	279
Outer Java-Bali I	11.0	33.8	2.8	36.2	2.2	14.0	100.0	3,423
Outer Java-Bali II	15.7	41.8	2.6	23.1	4.0	12.8	100.0	1,403
Total	11.0	31.6	2.3	39.8	2.6	12.6	100.0	14,634

Note: Total includes 5 users of intravag/diaphragm/foam.

There is little difference in the selection of the source of supply between current users in urban and rural areas. The main reason for selecting a family planning source varies slightly by province (Table 5.15.2). Proximity to home is the most common reason cited by women in every province but is more pronounced among women in West Kalimantan (69 percent). Availability of transportation (16 percent) and privacy (10 percent) are more frequently cited by women in East Timor. Women in North Sulawesi are more likely than women in other provinces to base their decision on competency and friendly services (15 percent), while women in East Kalimantan cited the use of other services at the same facility (12 percent) more often than other women. However, reasonable cost (33 percent) is the commonly cited by women in West Nusa Tenggara.

## 5.9 Timing of Sterilization

Given the importance of female sterilization as a way of preventing women in high risk groups to become pregnant, the family planning movement provides information concerning this method. The program also provides services in accordance to the woman's age and health status. Therefore, it is identified as voluntary sterilization. It is of interest to know the trend in the level of use of the method, especially in relation to the age of the woman at the time of operation. In using these data, however, the problem of censoring must be taken into account. Since the survey includes ever-married women 15-49 only, sterilized women age 50 and over are not covered.



**Table 5.13 Mean cost of contraceptive methods and services**

Percentage of current users of modern contraceptive methods who get their method free and the mean cost (in rupiahs) of the method (including services) for those who pay for it, by type of source, method, region, and province, Indonesia 1997

Method/ Region and province	Source of contraceptive method and mean cost of contraceptives								
	Government			Private			Other		
	Free	Mean cost (Rp.) <sup>1</sup>	Number of users	Free	Mean cost (Rp.) <sup>1</sup>	Number of users	Free	Mean cost (Rp.) <sup>1</sup>	Number of users
<b>Method</b>									
Pill	9.2	876	1,401	4.3	1,589	1,327	10.4	734	1,425
IUD	59.7	6,357	1,316	17.9	37,362	705	71.0	3,001	169
Injection	4.6	4,186	1,773	1.5	4,806	3,487	7.0	3,774	427
Condom	*	*	29	8.0	3,045	135	*	*	15
Implants	36.8	7,152	1,144	15.0	13,178	268	39.4	5,261	189
Female sterilization	32.0	229,976	579	20.7	424,858	242	*	*	5
<b>Region/Province</b>									
Java-Bali	26.1	21,029	3,902	4.6	18,302	4,473	17.6	1,682	1,440
DKI Jakarta	23.1	49,402	149	4.4	39,988	399	(38.4)	(1,795)	16
West Java	21.6	31,112	1,107	3.3	19,055	1,586	13.2	2,091	331
Central Java	28.0	12,632	1,219	4.6	10,685	1,101	29.8	1,765	340
DI Yogyakarta	44.4	8,191	123	7.0	19,489	108	50.9	479	30
East Java	27.5	15,873	1,167	6.0	15,172	1,138	12.0	1,486	720
Bali	19.2	27,200	138	4.6	32,511	140	*	*	3
Outer Java-Bali I	24.5	26,619	1,531	7.2	22,822	1,332	13.8	1,942	552
Dista Aceh	22.5	18,717	99	10.2	42,775	41	13.7	2,053	48
North Sumatra	26.6	85,378	237	9.7	31,594	370	(4.9)	(2,528)	62
West Sumatra	37.5	58,202	92	10.5	16,869	97	(20.5)	(1,853)	22
South Sumatra	27.0	8,744	176	4.3	20,492	244	12.4	3,104	58
Lampung	21.0	5,685	175	3.9	4,794	267	10.8	2,354	113
West Nusa Tenggara	35.3	11,052	184	8.9	70,762	42	41.2	1,865	60
West Kalimantan	8.2	6,603	152	0.9	32,537	46	4.5	1,922	48
South Kalimantan	30.3	10,406	89	8.0	18,807	68	8.4	403	70
North Sulawesi	22.9	10,976	106	10.3	5,075	76	15.6	1,671	27
South Sulawesi	19.2	32,085	222	8.1	39,757	81	13.3	1,191	44
Outer Java-Bali II	27.3	12,053	811	10.2	29,465	361	23.6	1,632	238
Riau	10.6	25,040	90	6.5	29,804	87	(22.7)	(2,279)	21
Jambi	18.8	7,345	116	4.2	45,101	63	10.9	1,703	51
Bengkulu	40.0	9,571	45	3.2	6,404	43	11.1	857	25
East Nusa Tenggara	53.2	11,141	108	*	*	14	66.4	592	31
East Timor	66.2	26,604	26	*	*	1	*	*	2
Central Kalimantan	7.7	7,589	94	2.2	2,709	27	*	*	6
East Kalimantan	19.1	11,585	90	21.4	28,246	75	14.7	1,302	24
Central Sulawesi	21.8	13,713	76	(6.8)	(13,446)	14	13.0	1,034	36
Southeast Sulawesi	35.6	5,189	46	(11.0)	(5,830)	10	26.2	2,251	22
Maluku	31.1	6,805	52	(17.5)	(90,780)	17	(32.0)	(3,060)	10
Irian Jaya	34.4	14,883	67	(7.2)	(69,963)	10	(33.0)	(4,445)	11
<b>Total</b>	25.8	21,279	6,244	5.4	19,883	6,166	17.3	1,744	2,229

Note: Total includes 5 users of intravag/diaphragm/foam. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> The exchange rate is about Rp. 3,700 to US\$ 1.00.

Table 5.16 presents the percent distribution of sterilized women by age at the time of sterilization according to the number of years since the operation. As expected, the vast majority (68 percent) of women were sterilized at age 30 or over. The median age at the time of sterilization is 31.8 years, which suggests no change since 1994 (31.6 years).



**Table 5.14 Source of supply for modern contraceptive methods**

Percent distribution of current users of modern contraceptive methods by most recent source of supply or information, according to specific methods, Indonesia 1997

Source of supply	Contraceptive method							Total
	Pill	IUD	Injec- tion	Condom	Implants	Female sterili- zation	Male sterili- zation	
<b>Public</b>	33.7	60.2	31.2	16.3	71.4	70.1	86.5	43.0
Government hospital	0.7	8.0	1.2	1.0	4.8	67.9	72.1	6.7
Health center ( <i>puskesmas</i> )	24.3	46.8	29.0	12.0	55.0	2.2	14.4	31.3
Family planning fieldworker	5.6	0.5	0.3	2.9	1.9	0.0	0.0	2.0
Family planning mobile clinic	0.0	0.9	0.1	0.0	1.1	0.0	0.0	0.3
Other government	0.1	0.2	0.1	0.4	0.0	0.0	0.0	0.1
Safari KB	0.0	3.2	0.1	0.0	5.9	0.0	0.0	1.2
Village official	3.0	0.5	0.4	0.0	2.7	0.0	0.0	1.4
<b>Medical private</b>	31.9	32.1	61.3	75.5	16.8	29.4	8.7	41.9
Hospital	0.7	4.7	0.9	1.3	1.5	22.5	8.3	2.7
Family planning clinic	1.8	2.1	2.2	0.4	0.4	4.9	0.4	2.0
Doctor	1.6	8.1	6.0	1.8	3.2	1.9	0.0	4.4
Midwife	18.5	17.1	49.9	2.5	11.3	0.0	0.0	28.3
Pharmacy	7.8	0.0	0.1	69.5	0.0	0.0	0.0	3.1
Other private	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.2
Health officer (Mantri Kesehatan)	1.1	0.1	2.2	0.0	0.4	0.0	0.0	1.2
<b>Other private</b>	34.4	7.8	7.5	5.9	11.5	0.1	4.8	15.1
Village delivery post ( <i>polindes</i> )	2.7	0.4	3.3	0.0	3.1	0.0	0.0	2.4
Health post ( <i>posyandu</i> )	16.3	6.2	2.9	4.1	5.8	0.0	0.0	7.3
Family planning post	10.7	1.0	1.2	0.9	1.9	0.0	0.0	3.8
Traditional birth attendant ( <i>dukun</i> )	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Friend/relative	1.6	0.0	0.1	0.6	0.0	0.0	0.0	0.5
Other source	2.4	0.1	0.1	0.3	0.7	0.1	4.8	0.8
Don't know	0.0	0.0	0.0	2.3	0.0	0.4	0.0	0.1
<b>Total</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Number of users<sup>1</sup></b>	4,153	2,191	5,687	179	1,601	826	102	14,742

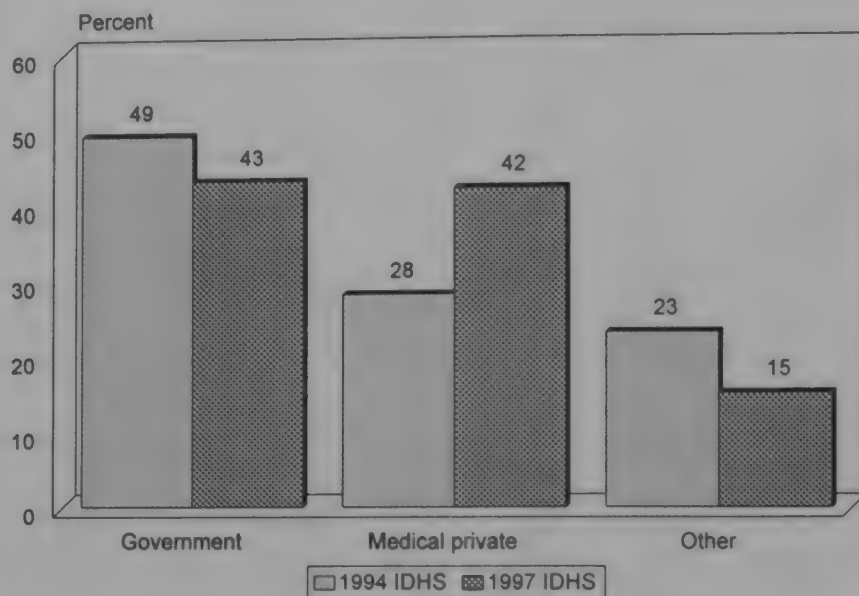
Note: Total includes 5 users of intravag/diaphragm/foam.

## 5.10 Knowledge of the Fertile Period

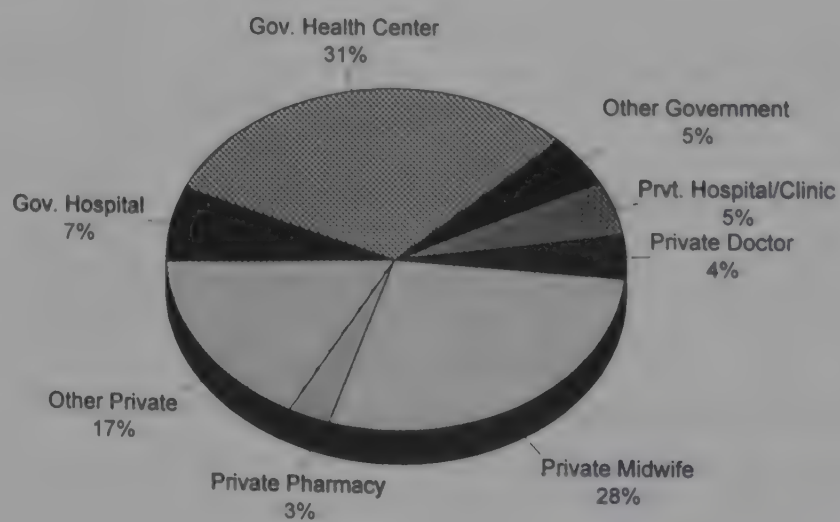
A basic knowledge of female reproductive physiology and the fertile period is useful for the successful practice of periodic abstinence. The success of periodic abstinence depends on women's understanding of the monthly cycle and the days when a woman is most likely to conceive. Table 5.17 presents information on knowledge of the fertile period among current users of periodic abstinence, current users of calendar rhythm, and current users of any method.

The data indicate that knowledge of the reproductive cycle is generally limited. One in three current users does not know when a woman is most likely to conceive, 32 percent believe a woman can conceive at any time in her cycle, and about 17 percent say that a woman is most likely to conceive just after her period has ended. Only about 16 percent gave the "correct" response that a woman has the greatest chance of conceiving in the middle of her ovulatory cycle.

**Figure 5.5**  
**Distribution of Current Users of Modern Contraceptive Methods by Source of Supply, Indonesia, 1994 and 1997**

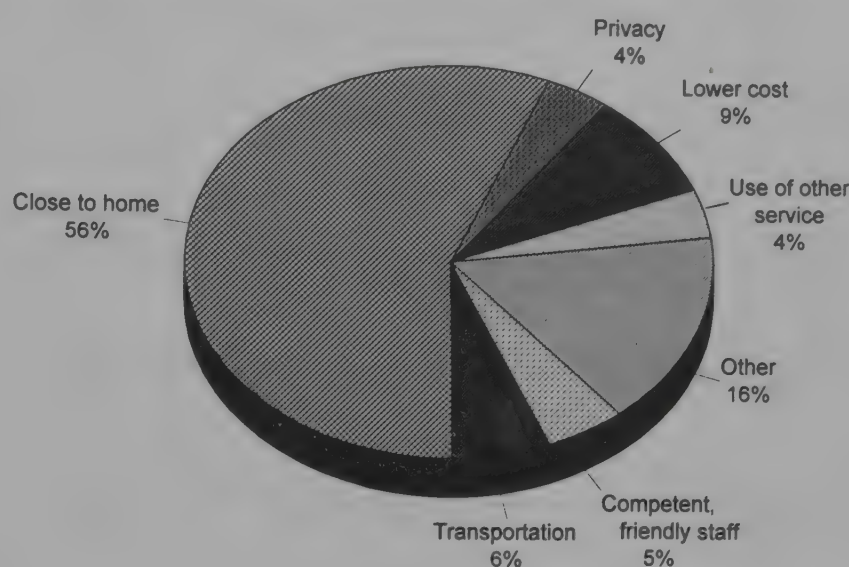


**Figure 5.6**  
**Distribution of Current Users of Modern Contraceptive Methods by Source of Supply**



IDHS97

**Figure 5.7**  
**Distribution of Current Users of Modern**  
**Contraceptive Methods by Reason for Using Most Recent**  
**Source of Supply**



IDHS97

Women who are using periodic abstinence are considerably more knowledgeable about the ovulatory cycle than women in general; 68 percent of these women know when they are most fertile, and only 3 percent say they do not know. It should be noted that the precoded response categories for this question are only one way of dividing the cycle into periods. It is possible that women who gave "other" responses, such as "one week after her period," were coded in the category "right after period has ended," instead of in the category "in the middle of the cycle." Thus, women may actually have a more accurate understanding of their cycle than is presented in Table 5.17.

### 5.11 Knowledge of the Effects of Breastfeeding on Pregnancy

Knowledge of the effects of breastfeeding on pregnancy is very important in the postpartum contraceptive program. Postpartum family planning can be promoted through the use of LAM (lactational amenorrheic method).

Breastfeeding can be an effective method of family planning if the mother has not resumed menstruation after giving birth, and she practices exclusive or near-exclusive breastfeeding within 6 months after the baby is born. In applying the LAM method, if any of the criteria are not met, the woman is at risk of getting pregnant.

Table 5.18.1 presents the distribution of women by knowledge of the effects of breastfeeding on the risk of pregnancy by background characteristics. One in four women said that breastfeeding influences the risk of pregnancy; 17 percent of women said that breastfeeding reduces the risk of pregnancy, 7 percent said it increases the risk of pregnancy, while 28 percent of respondents did not know whether breastfeeding has any impact on the risk of pregnancy. Overall, only 2 percent of women met the LAM method criteria at the time of the survey.



Table 5.15.1 Reason for selecting current sources of supply for contraceptive methods: background characteristics

Percent distribution of current users of modern contraceptive methods by main reason for using current source of supply (rather than another source), according to background characteristics, Indonesia 1997

Background characteristic	Main reason for using current source of supply													Number of users	
	Closer to home	Closer to market/work	Avail-ability of transport	More competent/friendly staff	Cleaner facility	Offers more privacy	Shorter waiting time	More hours of operation	Use other services	Lower cost	Wanted anonymity	Other	Don't know/Missing		Total
<b>Residence</b>															
Urban	50.7	2.5	5.0	7.6	1.4	6.4	1.2	0.8	4.7	8.8	0.4	10.2	0.2	100.0	4,122
Rural	57.9	1.9	5.7	4.5	0.5	3.0	0.7	0.8	4.0	8.8	0.2	11.5	0.5	100.0	10,621
<b>Region/Residence</b>															
Java-Bali	55.7	2.1	4.4	5.5	0.5	3.6	0.8	0.8	4.2	8.4	0.2	13.1	0.5	100.0	9,892
Urban	51.0	2.5	4.5	7.7	1.1	5.9	1.1	0.7	4.6	9.2	0.3	11.2	0.2	100.0	3,039
Rural	57.8	1.9	4.4	4.5	0.3	2.7	0.7	0.9	4.1	8.1	0.2	13.9	0.6	100.0	6,853
Outer Java-Bali I	57.0	2.1	6.9	5.4	1.1	4.8	0.7	0.6	3.6	10.0	0.3	7.3	0.2	100.0	3,433
Urban	51.9	2.6	5.9	6.9	2.4	8.3	1.5	0.6	4.5	6.9	0.8	7.2	0.5	100.0	759
Rural	58.4	1.9	7.2	4.9	0.7	3.9	0.5	0.6	3.4	10.8	0.1	7.3	0.1	100.0	2,674
Outer Java-Bali II	54.7	2.3	10.0	4.1	0.9	3.5	1.8	1.3	5.1	8.3	0.4	7.4	0.3	100.0	1,418
Urban	44.8	2.6	8.0	8.2	1.4	6.6	2.1	1.6	5.9	9.8	0.4	8.6	0.1	100.0	324
Rural	57.7	2.2	10.5	2.8	0.8	2.5	1.7	1.1	4.8	7.9	0.4	7.1	0.4	100.0	1,094
<b>Education</b>															
No education	51.3	1.8	5.0	3.1	0.5	2.0	1.0	0.7	5.5	11.8	0.6	15.8	1.0	100.0	1,459
Some primary	59.2	1.4	6.2	4.2	0.3	2.9	0.5	0.7	3.6	8.9	0.2	11.4	0.5	100.0	3,885
Completed primary	59.2	1.9	5.2	4.6	0.4	2.8	0.7	0.9	4.1	9.6	0.1	10.2	0.4	100.0	4,977
Some secondary +	50.8	3.0	5.6	8.0	1.5	6.7	1.3	0.9	4.3	6.8	0.4	10.6	0.2	100.0	4,421
<b>Reason for using method</b>															
To space births	60.1	2.2	6.0	5.0	0.6	4.1	0.9	0.7	3.2	8.1	0.2	8.7	0.3	100.0	6,536
To limit births	52.6	2.0	5.2	5.6	0.8	3.7	0.9	0.9	4.9	9.3	0.3	13.2	0.5	100.0	8,207
Total	55.9	2.1	5.5	5.3	0.7	3.9	0.9	0.8	4.2	8.8	0.3	11.2	0.4	100.0	14,742

Table 5.15.2 Reason for selecting current sources of supply for contraceptive methods: region and province

Percent distribution of current users of modern contraceptive methods by main reason for using current source of supply (rather than another source), according to region and province, Indonesia 1997

Main reason for using current source of supply																
Region and province	Closer to home	Closer to market/work	More			Cleaner facility	Offers more privacy	Shorter waiting time	More hours of operation	Use other services	Lower cost	Wanted anonymity	Other	Don't know/ Missing	Total	Number of users
			Avail-ability of transport	compe-tent/friendly staff	hours											
Java-Bali	55.7	2.1	4.4	5.5	0.5	3.6	0.8	0.8	4.2	8.4	0.2	13.1	0.5	100.0	9,892	
DKI Jakarta	50.5	2.2	1.8	5.7	0.6	7.6	1.8	0.6	5.1	11.0	0.6	12.3	0.0	100.0	566	
West Java	60.0	1.8	7.9	4.2	0.8	3.2	0.3	0.8	4.3	8.2	0.1	8.0	0.5	100.0	3,059	
Central Java	56.5	1.5	4.5	3.9	0.5	2.4	0.6	0.4	7.4	10.1	0.1	11.0	1.1	100.0	2,684	
DI Yogyakarta	51.7	1.8	1.7	6.6	0.1	7.5	2.6	3.6	3.0	9.9	0.3	11.3	0.0	100.0	263	
East Java	52.2	2.9	1.8	7.7	0.3	3.9	1.1	0.9	1.3	6.6	0.4	20.6	0.1	100.0	3,037	
Bali	54.6	1.7	1.6	10.4	0.6	6.2	1.0	1.7	5.5	7.7	0.2	8.4	0.4	100.0	282	
Outer Java-Bali I	57.0	2.1	6.9	5.4	1.1	4.8	0.7	0.6	3.6	10.0	0.3	7.3	0.2	100.0	3,433	
Dista Aceh	49.4	3.2	10.5	8.5	0.6	8.9	0.8	0.0	1.9	11.4	0.9	3.9	0.0	100.0	188	
North Sumatra	59.6	4.0	4.0	4.2	0.6	6.6	0.5	0.5	4.5	7.5	0.5	6.6	0.7	100.0	671	
West Sumatra	59.1	1.6	3.2	4.9	1.8	6.8	1.1	1.0	3.8	8.5	0.0	8.3	0.0	100.0	210	
South Sumatra	51.6	1.4	5.3	7.8	2.0	4.1	0.4	0.4	3.0	12.1	0.0	11.7	0.2	100.0	477	
Lampung	63.2	1.8	9.2	4.3	0.2	3.9	0.1	0.2	2.1	7.3	0.2	7.4	0.0	100.0	570	
West Nusa Tenggara	38.1	0.8	4.0	6.3	0.7	1.6	3.8	0.5	2.0	32.8	0.6	8.7	0.0	100.0	286	
West Kalimantan	68.5	0.4	8.8	3.2	0.3	1.5	0.0	1.2	5.2	4.0	0.0	6.9	0.0	100.0	248	
South Kalimantan	59.8	3.1	4.9	2.1	0.6	4.1	0.7	0.9	8.8	3.9	0.5	10.5	0.0	100.0	228	
North Sulawesi	49.8	1.7	10.9	15.0	0.2	6.0	0.4	1.1	1.4	8.7	0.0	4.1	0.6	100.0	209	
South Sulawesi	60.6	1.2	11.4	2.3	4.1	5.5	0.8	0.7	4.2	6.4	0.0	2.7	0.0	100.0	346	
Outer Java-Bali II	54.7	2.3	10.0	4.1	0.9	3.5	1.8	1.3	5.1	8.3	0.4	7.4	0.3	100.0	1,418	
Riau	50.1	2.6	9.5	5.0	1.1	2.4	1.1	1.0	2.4	10.0	0.2	13.9	0.6	100.0	199	
Jambi	63.7	1.8	10.8	1.8	0.3	5.7	1.6	2.0	5.1	4.4	0.1	2.3	0.4	100.0	230	
Bengkulu	58.2	1.0	2.0	2.1	0.0	4.7	0.8	2.4	3.4	9.3	0.0	15.8	0.2	100.0	113	
East Nusa Tenggara	59.1	2.3	15.4	2.9	3.1	2.5	3.8	0.4	0.8	3.5	0.7	5.2	0.4	100.0	157	
East Timor	52.7	1.4	16.1	1.6	2.4	10.4	0.9	2.0	0.9	2.8	5.2	3.1	0.4	100.0	29	
Central Kalimantan	54.8	1.2	13.2	9.3	0.9	1.7	1.4	0.6	2.4	10.1	0.2	4.1	0.0	100.0	127	
East Kalimantan	40.3	1.6	2.4	6.8	0.6	5.1	2.3	1.2	11.8	14.4	0.6	12.9	0.0	100.0	189	
Central Sulawesi	62.9	4.9	6.8	2.2	0.7	1.5	2.2	1.0	4.0	7.4	0.0	5.9	0.5	100.0	126	
Southeast Sulawesi	49.7	2.8	13.7	1.7	0.0	2.2	2.0	1.3	7.4	13.0	0.0	5.9	0.3	100.0	79	
Maluku	52.2	2.5	19.0	0.7	0.3	3.7	1.6	1.1	8.8	6.8	0.4	2.9	0.0	100.0	79	
Irian Jaya	56.7	3.5	11.0	7.8	1.2	0.7	0.4	1.1	8.1	6.9	0.3	1.5	0.7	100.0	80	
Total	55.9	2.1	5.5	5.3	0.7	3.9	0.9	0.8	4.2	8.8	0.3	11.2	0.4	100.0	14,742	

**Table 5.16 Timing of sterilization**

Percent distribution of sterilized women by age at the time of sterilization, according to the number of years since the operation, Indonesia 1997

Years since operation	Age at time of sterilization						Total	Number of women	Median age <sup>1</sup>
	<25	25-29	30-34	35-39	40-44	45-49			
<2	2.4	9.3	36.4	30.7	18.4	2.8	100.0	122	33.9
2-3	1.3	20.8	42.0	30.2	5.7	0.0	100.0	88	33.1
4-5	0.3	20.8	32.7	28.5	17.7	0.0	100.0	96	32.9
6-7	9.2	26.6	28.5	30.1	5.6	0.0	100.0	133	31.6
8-9	0.9	12.7	54.1	25.0	7.3	0.0	100.0	90	33.4
10+	12.4	38.1	40.5	9.0	0.0	0.0	100.0	298	a
Total	6.6	25.3	38.7	21.8	7.1	0.4	100.0	826	31.8

<sup>1</sup> Median age was calculated only for women less than 40 years of age to avoid problems of censoring.

<sup>a</sup> Not calculated due to censoring

**Table 5.17 Knowledge of fertile period**

Among currently married women who are currently using a method of contraception, the percent distribution of users of periodic abstinence, of users of calendar rhythm, and of users of any method by knowledge of the fertile period during the ovulatory cycle, Indonesia 1997

Perceived fertile period	Current users of:		
	Periodic abstinence	Calendar rhythm	Any method <sup>1</sup>
During menstrual period	0.1	0.1	0.4
Right after period has ended	23.1	23.1	16.8
In the middle of the cycle	67.4	73.3	16.4
Just before period begins	2.5	3.2	1.7
No particular time	4.7	0.0	32.2
Don't know	2.1	0.2	32.5
Total	100.0	100.0	100.0
Number	297	233	15,438

<sup>1</sup> Includes 19 women who use the sympto-thermal method

Women age 25 to 44 years are more knowledgeable about the effect of breastfeeding on the risk of pregnancy than younger or older women. Women in urban areas appear to have more knowledge than those in rural areas (27 percent compared with 12 percent). The knowledge of the effect of breastfeeding on pregnancy is positively associated with education. While 7 percent of women with no education know that breastfeeding can reduce the risk of pregnancy, the proportion for women with secondary or higher education is 30 percent.



Table 5.18.1 Contraceptive effect of breastfeeding: background characteristics

Percent distribution of currently married women by perceived effect of breastfeeding on risk of pregnancy and percentage who meet lactational amenorrheic method criteria, according to selected background characteristics, Indonesia 1997

Background characteristic	Pregnancy risk of breastfeeding					Total	Meets LAM criteria	Number of women
	Un-changed	In-creased	De-creased	Depends	Don't know			
<b>Age</b>								
15-19	48.1	3.7	6.4	1.4	40.4	100.0	3.5	1,246
20-24	49.3	7.5	13.5	1.0	28.7	100.0	3.4	3,901
25-29	46.6	7.3	18.5	1.1	26.4	100.0	3.0	5,250
30-34	46.6	7.1	19.5	1.9	24.8	100.0	2.8	5,153
35-39	46.5	5.9	17.6	1.3	28.8	100.0	1.4	4,876
40-44	49.4	6.3	16.5	1.3	26.5	100.0	0.5	3,605
45-49	51.2	5.4	13.8	1.6	28.0	100.0	0.0	2,854
<b>Residence</b>								
Urban	42.4	7.7	27.3	1.8	20.8	100.0	1.7	7,428
Rural	50.0	6.1	12.4	1.2	30.3	100.0	2.2	19,457
<b>Region/Residence</b>								
Java-Bali	42.4	8.4	16.7	1.3	31.1	100.0	1.7	16,888
Urban	38.5	9.1	27.8	1.7	22.9	100.0	1.5	5,283
Rural	44.2	8.1	11.7	1.1	34.9	100.0	1.9	11,605
Outer Java-Bali I	56.6	2.9	16.9	1.6	22.0	100.0	2.5	6,983
Urban	51.4	4.0	26.3	2.5	15.8	100.0	1.9	1,494
Rural	58.0	2.6	14.3	1.3	23.7	100.0	2.6	5,489
Outer Java-Bali II	58.5	4.4	14.0	1.3	21.7	100.0	3.2	3,014
Urban	53.1	4.4	25.2	1.6	15.7	100.0	2.7	651
Rural	60.0	4.4	11.0	1.2	23.4	100.0	3.3	2,364
<b>Education</b>								
No education	52.7	6.1	7.0	0.5	33.6	100.0	1.1	3,415
Some primary	50.3	5.5	9.2	1.2	33.8	100.0	2.6	7,304
Completed primary	47.9	6.7	14.4	1.6	29.5	100.0	1.9	8,486
Some secondary +	43.5	7.5	30.0	1.8	17.3	100.0	2.2	7,680
<b>Total</b>	<b>47.9</b>	<b>6.5</b>	<b>16.5</b>	<b>1.4</b>	<b>27.7</b>	<b>100.0</b>	<b>2.1</b>	<b>26,886</b>

On average, knowledge of the effects of breastfeeding on pregnancy varies little between regions, but there are substantial differences among provinces (Table 5.18.2). It appears that the highest level of knowledge of the contraceptive effect of breastfeeding is in DI Yogyakarta (46 percent) followed by DKI Jakarta (41 percent), while the lowest level is in East Nusa Tenggara (4 percent).

Table 5.18.2 Contraceptive effect of breastfeeding: region and province

Percent distribution of currently married women by perceived effect of breastfeeding on risk of pregnancy and percentage who meet lactational amenorrheic method criteria, according to region and province, Indonesia 1997

Region and province	Pregnancy risk of breastfeeding					Total	Meets LAM criteria	Number of women
	Un-changed	In-creased	De-creased	Depends	Don't know			
<b>Java-Bali</b>	42.4	8.4	16.7	1.3	31.1	100.0	1.7	16,888
DKI Jakarta	39.4	3.1	41.0	2.5	14.1	100.0	1.2	1,045
West Java	45.4	6.9	13.9	2.3	31.5	100.0	2.4	5,412
Central Java	48.1	9.4	15.9	0.7	25.9	100.0	2.1	4,367
DI Yogyakarta	35.0	6.1	45.7	1.2	12.0	100.0	0.9	412
East Java	34.4	10.8	13.2	0.5	41.1	100.0	1.0	5,227
Bali	59.5	3.2	18.2	0.8	18.3	100.0	1.4	425
<b>Outer Java-Bali I</b>	56.6	2.9	16.9	1.6	22.0	100.0	2.5	6,983
Dista Aceh	58.5	2.6	25.7	0.9	12.3	100.0	2.0	517
North Sumatra	51.9	2.4	19.5	2.5	23.8	100.0	2.7	1,581
West Sumatra	60.4	2.3	23.8	3.2	10.3	100.0	3.0	503
South Sumatra	56.3	2.9	15.4	0.7	24.7	100.0	2.4	870
Lampung	51.7	3.1	14.2	2.0	28.9	100.0	2.1	880
West Nusa Tenggara	54.7	5.6	17.7	1.6	20.4	100.0	2.5	524
West Kalimantan	55.2	3.9	12.4	0.7	27.7	100.0	1.8	445
South Kalimantan	59.5	2.9	16.3	1.4	19.9	100.0	2.0	389
North Sulawesi	72.0	4.8	9.5	0.8	12.9	100.0	1.6	329
South Sulawesi	61.2	1.6	12.7	0.8	23.7	100.0	3.2	945
<b>Outer Java-Bali II</b>	58.5	4.4	14.0	1.3	21.7	100.0	3.2	3,014
Riau	44.6	3.6	23.8	0.0	28.0	100.0	2.7	450
Jambi	58.3	6.9	10.3	2.3	22.2	100.0	2.2	382
Bengkulu	58.7	2.9	13.7	0.1	24.6	100.0	2.3	181
East Nusa Tenggara	77.0	0.7	3.8	0.6	17.9	100.0	3.9	446
East Timor	43.7	7.5	17.2	9.2	22.5	100.0	5.3	116
Central Kalimantan	61.5	7.2	21.9	0.5	8.9	100.0	1.6	222
East Kalimantan	55.2	4.6	19.9	1.7	18.6	100.0	3.3	345
Central Sulawesi	56.8	2.8	10.2	1.5	28.8	100.0	3.9	251
Southeast Sulawesi	67.2	1.7	6.6	2.1	22.3	100.0	3.8	168
Maluku	62.9	1.5	15.2	0.9	19.6	100.0	4.1	220
Irian Jaya	51.6	12.3	11.2	0.4	24.4	100.0	2.8	233
<b>Total</b>	47.9	6.5	16.5	1.4	27.7	100.0	2.1	26,886

## CHAPTER 6

### FERTILITY PREFERENCES

This chapter addresses questions that allow an assessment of the extent of unwanted fertility in Indonesia, the degree of acceptance of the two-child family norm, and the level of need for contraceptive services. Respondents in the 1997 IDHS were asked questions concerning whether they wanted more children, and if so, how long they would prefer to wait before the next child, and if they could start afresh, how many children in all they would want. Since an underlying objective of the Indonesian family planning program is to persuade couples to have only two children and to space them at least five years apart, it is important to understand to what extent these fertility preferences have been accepted. Two other issues are examined here as well: the extent to which unwanted or mistimed births occur and the effect that the prevention of such births would have on fertility rates.

Interpretation of data on fertility preferences has always been the subject of controversy. Survey questions have been criticized on the grounds that (1) answers are misleading because they may reflect unformed, ephemeral views, that are held with weak intensity and little conviction, and (2) they do not take into account the effect of social pressures or the attitude of other family members, particularly the husband, who may exert a major influence on reproductive decisions.

The first objection has greater force in noncontracepting societies where the idea of conscious reproductive choice may still be alien; preference data from these settings should be interpreted with caution. This objection probably has little relevance in Indonesia where widespread public exposure to the family planning program has no doubt caused most people to establish opinions regarding fertility regulation. The second objection is correct in principle. In practice, however, its importance is doubtful; for instance, the evidence from surveys in which both husbands and wives are interviewed separately suggests that there is little difference in their views.

The inclusion of women who are currently pregnant complicates the measurement of views on future childbearing. For these women the question on desire for more children was rephrased to refer to desire for another child after the one that they were expecting. To take into account the way in which the preference variable is defined for pregnant women, the results have been classified by number of living children, including current pregnancies. In addition, the question on preferred waiting time before the next birth was rephrased for pregnant women to make clear that the information wanted was the preferred waiting time after the birth of the child the respondent was expecting.

Data for women who have been sterilized require special analytic treatment. The general strategy in some tables in this chapter is to classify these women as wanting no more children.

#### 6.1 Desire for Additional Children

Table 6.1 presents the distribution of currently married women by desire for more children, according to the number of living children. Figures in the last column show that 46 percent of these women indicated that they wanted no more children, while 3 percent had been sterilized. Forty-four percent of married women said that they wanted to have additional children; 16 percent wanted the child within two years, 25 percent wanted the child after two years, and 4 percent were unsure about the time. Five percent of women were not sure whether they wanted another child (see Figure 6.1).



**Table 6.1 Fertility preferences by number of living children**

Percent distribution of currently married women by desire for more children, according to number of living children, Indonesia 1997

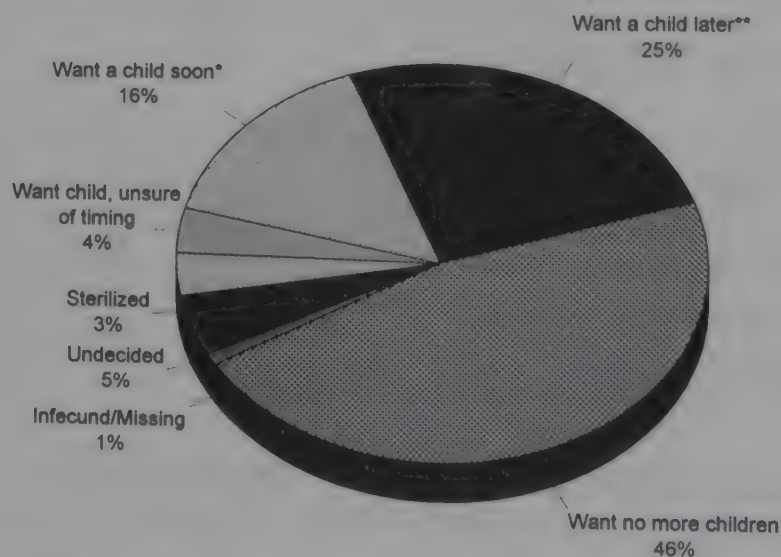
Desire for children	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
Have another soon <sup>2</sup>	82.8	23.0	11.1	5.2	3.4	2.4	1.1	15.5
Have another later <sup>3</sup>	7.9	57.8	26.1	15.0	6.8	4.2	1.8	25.3
Have another, undecided when	3.4	5.1	4.9	2.7	2.4	1.2	0.7	3.6
Undecided	1.4	3.7	5.9	5.7	5.7	5.1	5.7	5.0
Want no more	2.3	9.2	49.7	65.2	72.5	77.7	82.1	46.3
Sterilized	0.2	0.3	1.7	5.2	8.0	8.0	5.9	3.3
Declared infecund	1.9	0.7	0.5	1.0	1.2	1.3	2.8	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,751	6,662	6,765	4,880	3,032	1,771	2,024	26,886

<sup>1</sup>Includes current pregnancy

<sup>2</sup>Want next birth within 2 years

<sup>3</sup>Want to delay next birth for 2 or more years

**Figure 6.1  
Fertility Preferences of  
Currently Married Women 15-49**



\*Within 2 years

\*\* After 2 or more years

IDHS97

More than half of currently married women with two children want no more children or have been sterilized. Seven in ten women with three children either have been sterilized or want no more children, and 15 percent want to delay the next birth for at least two years. Findings from the 1994 IDHS show similar patterns, with slightly more desire for terminating childbearing.

Table 6.2 shows the distribution of currently married women by desire for children, according to current age. The table indicates the expected pattern, i.e., younger women (age 15-29) are more likely to want to have another child soon or to space their children, whereas older women (age 30 years and over) tend to want to stop childbearing. For example, 93 percent of women age 15-19 want to have another child, while among women age 30-34 the proportion is 40 percent, and among women age 40-44 it is only 15 percent. At the same time, six in ten women age 15-24 want to delay their next child for at least two years, while at most 19 percent of women 30 years and older want to do so.

**Table 6.2 Fertility preferences by age**

Percent distribution of currently married women by desire for more children, according to age, Indonesia 1997

Desire for children	Age of woman							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Have another soon <sup>1</sup>	28.8	18.7	18.5	16.5	14.4	10.5	5.9	15.5
Have another later <sup>2</sup>	58.8	59.4	42.4	19.4	8.2	2.9	0.8	25.3
Have another, undecided when	5.4	5.2	4.8	4.3	3.0	1.9	0.4	3.6
Undecided	4.0	4.9	6.0	6.1	6.0	3.2	2.0	5.0
Want no more	3.0	11.8	27.7	50.8	62.9	72.3	77.0	46.3
Sterilized	0.0	0.0	0.6	2.8	4.9	7.9	7.0	3.3
Declared infecund	0.0	0.0	0.0	0.1	0.5	1.4	6.9	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,246	3,901	5,250	5,153	4,876	3,605	2,854	26,886

<sup>1</sup>Want next birth within 2 years

<sup>2</sup>Want to delay next birth for 2 or more years

Table 6.3.1 shows the percentage of currently married women who want no more children by number of living children and background characteristics. Figures in the bottom row show that the desire to stop childbearing increases significantly among women with two or more children. More than half of women who have two children want no more children, and at least eight in ten women who have four or more children want to stop childbearing.

Looking at differentials by background characteristics, the table shows that in general urban women and women in Java-Bali are more likely to want to terminate childbearing than other women. These differentials were also evident in the 1994 IDHS (CBS et al., 1995). There is an interesting pattern in the data on the proportion wanting no more children by education. At parities one and two, women with less education are more likely to want to stop childbearing than women with more education. At parities four and above, the proportion who want no more children increases with increasing education.

Table 6.3.2 shows the percentage of currently married women who want no more children by region and province. Women in Java-Bali (except West Java) are generally more likely to want to stop childbearing than are women in other regions regardless of the number of children they already have (51 percent, compared with 48 percent or less). The desire to stop childbearing is particularly high in DI Yogyakarta and Bali (more than 60 percent), and low in Dista Aceh and East Timor (36 percent and 27 percent, respectively).

Table 6.3.1 Desire to limit childbearing: background characteristics

Percentage of currently married women who want no more children, by number of living children and selected background characteristics, Indonesia 1997

Background characteristic	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
<b>Residence</b>								
Urban	2.6	7.7	54.5	79.2	86.3	92.7	92.3	53.3
Rural	2.5	10.2	50.3	66.9	78.1	83.1	86.6	48.2
<b>Region/Residence</b>								
Java-Bali	3.3	11.5	59.1	76.0	85.3	90.1	89.8	51.0
Urban	3.3	8.8	58.0	82.1	88.9	95.0	92.8	54.0
Rural	3.3	12.6	59.5	73.1	83.3	87.5	88.4	49.6
Outer Java-Bali I	0.8	4.8	35.1	61.2	74.0	82.1	86.5	47.5
Urban	0.5	3.8	45.3	72.1	79.3	89.7	90.5	52.7
Rural	0.9	5.1	32.3	57.9	72.6	80.2	85.6	46.2
Outer Java-Bali II	0.4	5.7	36.6	62.2	75.2	79.7	86.7	46.9
Urban	0.6	6.1	43.1	73.3	83.6	85.6	94.3	49.3
Rural	0.4	5.6	34.6	59.2	73.2	78.5	85.0	46.2
<b>Education</b>								
No education	7.3	26.7	56.0	70.4	76.4	86.2	83.2	61.4
Some primary	1.4	17.7	53.1	64.8	79.4	84.5	87.8	58.1
Completed primary	2.8	7.8	50.1	72.0	79.9	86.5	90.9	44.8
Some secondary +	1.0	4.0	50.0	75.2	86.8	86.4	92.5	41.6
<b>Total</b>	<b>2.5</b>	<b>9.6</b>	<b>51.5</b>	<b>70.4</b>	<b>80.6</b>	<b>85.7</b>	<b>88.0</b>	<b>49.6</b>

Note: Women who have been sterilized are considered to want no more children.

<sup>1</sup>Includes current pregnancy

As observed in the 1991 and 1994 IDHS, Balinese women stand out as having adopted a two-child norm. At least seven in ten women in DI Yogyakarta, East Java and Bali, and North Sulawesi are ready to stop childbearing after having had two children.

## 6.2 Ideal and Actual Number of Children

Previously, this chapter focused on the respondent's wishes for the future, implicitly taking into account the number of children she already had. In ascertaining the ideal number of children (i.e., ideal family size), the respondent is required to perform the more difficult task of considering, abstractly and independently of her actual family size, the number of children she would choose if she could start again. When asked this question, 21 percent of women in the IDHS gave a non-numeric reply (Table 6.4). The percentage of women who give a non-numeric response increases with the number of children they already have; almost half of women with six or more children were unable to give a numeric response.

Since most ever-married women are currently married, the ideal number of children for both groups is almost the same. Overall, the ideal family size in Indonesia remained the same as in 1994 (2.9 children). Observance of the two-child family norm was slightly stronger in 1997 than in 1994; 37 percent of women reported two children as their ideal family size, compared with 36 percent in 1994. At the same time, the percentage of women whose ideal number of children was three or more declined by 1 percentage point.



**Table 6.3.2 Desire to limit childbearing: region and province**

Percentage of currently married women who want no more children, by number of living children, region, and province, Indonesia 1997

Region and province	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
<b>Java-Bali</b>	3.3	11.5	59.1	76.0	85.3	90.1	89.8	51.0
DKI Jakarta	1.1	6.6	50.3	79.1	92.2	97.6	98.4	50.4
West Java	3.7	9.8	44.0	59.3	76.2	82.9	82.3	44.8
Central Java	1.4	10.6	57.0	79.0	90.0	91.1	95.2	52.8
DI Yogyakarta	0.0	11.4	75.0	96.2	97.4	100.0	100.0	62.4
East Java	4.5	14.2	72.3	86.9	92.4	98.1	95.6	54.1
Bali	3.8	15.6	77.4	88.5	90.7	94.8	92.0	63.8
<b>Outer Java-Bali I</b>	0.8	4.8	35.1	61.2	74.0	82.1	86.5	47.5
Dista Aceh	1.2	3.1	22.1	42.5	58.8	66.0	71.4	35.7
North Sumatra	(0.0)	2.1	31.3	60.7	68.3	78.5	85.3	51.8
West Sumatra	(0.0)	5.0	36.2	63.9	81.6	87.5	87.8	50.9
South Sumatra	1.7	3.9	30.6	64.1	83.3	91.4	91.9	49.2
Lampung	(0.0)	5.8	40.7	65.2	85.1	95.1	96.6	51.3
West Nusa Tenggara	1.8	4.1	28.5	57.6	69.1	85.8	94.7	41.0
West Kalimantan	(0.0)	7.5	41.4	65.6	78.1	80.6	83.1	50.2
South Kalimantan	1.8	10.0	42.8	65.8	75.7	76.2	83.4	44.2
North Sulawesi	(0.0)	11.1	67.4	89.3	96.4	95.3	100.0	59.6
South Sulawesi	1.1	2.5	26.7	49.4	67.6	74.8	82.4	40.1
<b>Outer Java-Bali II</b>	0.4	5.7	36.6	62.2	75.2	79.7	86.7	46.9
Riau	0.0	3.7	28.6	51.7	69.6	84.7	93.4	45.2
Jambi	0.0	9.1	40.5	71.9	80.9	90.2	95.4	49.5
Bengkulu	(0.0)	1.2	37.6	73.8	90.7	88.5	100.0	56.7
East Nusa Tenggara	1.6	8.9	29.4	52.6	71.9	68.1	82.5	43.6
East Timor	(0.0)	4.6	16.3	24.5	40.3	42.9	54.7	27.0
Central Kalimantan	(0.0)	8.1	44.2	71.5	73.9	87.9	86.2	49.8
East Kalimantan	(0.0)	5.2	50.6	73.6	75.9	77.1	78.7	48.4
Central Sulawesi	0.0	3.4	33.6	65.5	80.6	84.7	81.6	43.1
Southeast Sulawesi	(0.0)	2.3	31.7	45.2	73.3	77.3	90.8	43.3
Maluku	(2.0)	7.7	33.3	71.2	90.5	85.5	88.7	55.0
Irian Jaya	(0.0)	3.5	43.0	66.6	71.4	85.9	88.2	48.7
<b>Total</b>	2.5	9.6	51.5	70.4	80.6	85.7	88.0	49.6

Note: Women who have been sterilized are considered to want no more children. Figures in parentheses are based on 25-49 unweighted women.

<sup>1</sup>Includes current pregnancy

The correlation between actual and ideal family size can be seen in the fact that women who have a small number of children are more likely to want a small number of children. As parity increases, the ideal number of children also increases. Two reasons have been suggested. First, to the extent that women want to achieve their fertility desires, women who want large families tend to have larger families. Second, women may rationalize their actual family size to be their ideal family size. As the actual number of children increases, their preference increases also. Further, women with larger families—being on average older than women with small families—may have larger ideal family sizes because of attitudes they acquired 20 to 30 years ago.

Despite the likelihood of some rationalization, respondents frequently state ideal family sizes that are lower than their actual number of living children. The difference can be taken as an indicator of surplus or unwanted fertility. At three and higher numbers of surviving children, the proportion of women stating ideal family sizes smaller than their own becomes sizeable. In fact, among women with six or more children, 39 percent say that if they were to start again they would have fewer children.

**Table 6.4 Ideal and actual number of children**

Percent distribution of ever-married women by ideal number of children, and mean ideal number of children for ever-married women and for currently married women, according to number of living children, Indonesia 1997

Ideal number of children	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
1	4.1	3.3	0.9	0.8	0.9	0.2	0.6	1.6
2	55.0	57.3	48.9	21.4	16.0	13.1	7.3	37.3
3	12.7	17.6	20.8	32.9	11.4	14.3	10.6	19.4
4	7.1	6.7	13.2	17.5	31.9	15.6	14.5	14.3
5	1.5	1.7	2.3	4.4	5.7	12.1	6.1	3.8
6+	0.8	0.7	1.1	2.3	5.4	7.4	14.3	3.1
Non-numeric response	18.7	12.7	12.8	20.6	28.7	37.2	46.4	20.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,993	7,167	7,154	5,175	3,262	1,891	2,168	28,810
<b>Ever-married women</b>								
Mean ideal number	2.4	2.4	2.7	3.2	3.6	3.9	4.4	2.9
Number of women	1,622	6,259	6,237	4,108	2,327	1,188	1,164	22,904
<b>Currently married women</b>								
Mean ideal number	2.4	2.4	2.7	3.2	3.6	3.8	4.4	2.9
Number of women	1,454	5,893	5,942	3,902	2,173	1,121	1,100	21,586

Note: The means exclude women who gave non-numeric responses.

<sup>1</sup> Includes current pregnancy

Table 6.5.1 presents the mean ideal number of children for all women by age and selected background characteristics. The ideal number of children varies across age groups; older women tend to want larger families than younger women. Urban women and women with some secondary education tend to want smaller families than rural women and women with less education. The mean ideal number of children is negatively associated with woman's education: the higher the level of education, the lower the ideal number of children.

There are notable differences in the mean ideal number of children between regions (see Table 6.5.2). Women in Java-Bali want at least 0.6 fewer children than women in other regions. Variation between provinces is even more substantial, ranging from a low of 2.4 children in DI Yogyakarta, Bali, and North Sulawesi to 4.8 in East Timor. The mean ideal number of children is less than three in all the provinces of Java-Bali, as well as South Kalimantan, North Sulawesi, East Kalimantan, and Central Sulawesi.

### 6.3 Need For Family Planning Services

*Unmet need* is defined as the percentage of currently married women who either do not want any more children or want to wait before having their next birth, but are not using any method of family planning. Women with an unmet need for *spacing* include pregnant women whose pregnancy was mistimed, amenorrheic women whose last birth was mistimed, and women who are neither pregnant nor amenorrheic and who are not using any method of family planning and want to wait two or more years for their next birth. Also included in unmet need for spacing are women who are unsure whether they want another child or who want another child but are unsure when to have the birth. Unmet need for *limiting*



refers to pregnant women whose pregnancy was unwanted, amenorrheic women whose last child was unwanted, and women who are neither pregnant nor amenorrheic and who are not using any method of family planning and who want no more children. Measures of unmet need for family planning are used to evaluate the extent to which programs are meeting the demand for services. According to these criteria, in 1997 the total unmet need for family planning services in Indonesia was 9 percent—of which about 5 percent was for limiting and 4 percent for spacing (see Table 6.6.1). A similar pattern was found in 1991 and 1994, when total unmet need was 13 percent and 11 percent, respectively, more or less evenly split between the need for spacing and for limiting.

**Table 6.5.1 Mean ideal number of children: background characteristics**

Mean ideal number of children for ever-married women, by age and selected background characteristics, Indonesia 1997

Background characteristic	Age of woman							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
<b>Residence</b>								
Urban	2.3	2.4	2.5	2.7	2.9	3.1	3.3	2.8
Rural	2.3	2.6	2.8	3.0	3.1	3.3	3.4	3.0
<b>Region/Residence</b>								
Java-Bali	2.2	2.4	2.5	2.7	2.8	3.0	3.0	2.7
Urban	2.3	2.4	2.4	2.6	2.8	3.0	3.1	2.7
Rural	2.2	2.4	2.6	2.8	2.8	3.0	3.0	2.7
Outer Java-Bali I	2.6	2.8	3.1	3.3	3.6	3.9	4.2	3.4
Urban	(2.4)	2.6	2.8	3.0	3.2	3.5	3.9	3.1
Rural	2.6	2.9	3.2	3.4	3.7	4.1	4.3	3.4
Outer Java-Bali II	2.6	2.8	3.0	3.4	3.6	3.8	3.9	3.3
Urban	(2.3)	2.5	2.7	2.9	3.2	3.5	3.7	3.0
Rural	2.6	2.8	3.1	3.5	3.7	3.9	4.0	3.4
<b>Education</b>								
No education	(3.3)	2.8	3.1	3.2	3.1	3.4	3.6	3.3
Some primary	2.4	2.8	3.1	3.0	3.2	3.3	3.4	3.1
Completed primary	2.3	2.6	2.6	2.9	3.2	3.3	3.4	2.8
Some secondary +	2.2	2.5	2.6	2.8	2.9	3.1	3.1	2.7
<b>Total</b>	2.3	2.6	2.7	2.9	3.1	3.3	3.4	2.9

Note: Figures in parentheses are based on 25 to 49 unweighted women.

*Demand for family planning* is defined as the sum of contraceptive prevalence (including currently pregnant or amenorrheic women whose pregnancy or last birth was the result of a contraceptive failure) and unmet need (Westoff and Ochoa, 1991). Overall, the total demand for family planning is 67 percent, of which 86 percent has been satisfied. Comparison of the 1994 and 1997 IDHS survey findings indicates that the percentage of the demand that is satisfied has increased by 2 percentage points.



Table 6.5.2 Mean ideal number of children: region and province

Mean ideal number of children for ever-married women, by age, region, and province, Indonesia 1997

Region and province	Age of woman						Total
	15-19	20-24	25-29	30-34	35-39	40-44	
<b>Java-Bali</b>	2.2	2.4	2.5	2.7	2.8	3.0	2.7
DKI Jakarta	(2.3)	2.4	2.5	2.7	2.9	3.0	2.7
West Java	2.3	2.6	2.8	3.0	3.3	3.5	2.9
Central Java	(2.4)	2.4	2.4	2.8	2.8	2.9	2.7
DI Yogyakarta	*	2.2	2.1	2.3	2.5	2.5	2.4
East Java	2.0	2.3	2.4	2.5	2.5	2.8	2.5
Bali	(2.1)	2.2	2.2	2.3	2.4	2.5	2.4
<b>Outer Java-Bali I</b>	2.6	2.8	3.1	3.3	3.6	3.9	3.4
Dista Aceh	(3.1)	3.5	3.5	3.9	4.3	4.4	3.9
North Sumatra	*	3.2	3.6	3.5	3.9	4.1	3.8
West Sumatra	*	3.0	3.2	3.2	3.6	3.9	3.4
South Sumatra	(2.6)	2.7	2.8	3.2	3.4	3.8	3.2
Lampung	(2.3)	2.5	2.9	3.0	3.3	3.4	3.0
West Nusa Tenggara	2.4	2.9	3.1	3.6	4.0	4.6	3.5
West Kalimantan	(2.6)	2.8	3.1	3.1	3.6	3.9	3.3
South Kalimantan	(2.4)	2.4	2.6	2.9	3.2	3.3	2.9
North Sulawesi	(2.0)	2.2	2.3	2.4	2.4	2.7	2.4
South Sulawesi	(2.5)	2.6	3.0	3.2	3.8	4.5	3.4
<b>Outer Java-Bali II</b>	2.6	2.8	3.0	3.4	3.6	3.8	3.3
Riau	(2.5)	2.8	3.1	3.4	3.6	3.7	3.3
Jambi	(2.3)	2.6	2.7	3.6	3.4	3.8	3.1
Bengkulu	(2.4)	2.7	2.8	3.1	3.5	3.8	3.1
East Nusa Tenggara	*	3.2	3.7	3.6	4.1	4.1	3.7
East Timor	*	4.2	4.7	5.0	5.2	4.6	4.8
Central Kalimantan	(2.4)	2.4	3.1	3.2	3.6	3.8	3.2
East Kalimantan	(2.5)	2.5	2.5	2.8	3.0	3.7	2.9
Central Sulawesi	(2.2)	2.4	2.8	3.1	3.1	3.4	2.9
Southeast Sulawesi	(2.7)	3.1	3.1	3.5	3.5	3.7	3.4
Maluku	*	2.8	2.9	3.2	3.3	3.6	3.2
Irian Jaya	*	2.7	2.8	3.3	3.5	3.5	3.2
<b>Total</b>	2.3	2.6	2.7	2.9	3.1	3.3	2.9

Note: Figures in parentheses are based on 25 to 49 unweighted women; an asterisk indicates that a figure is based on fewer than 25 women and has been suppressed.

Unmet need varies with age. Younger women are more likely to express a need for spacing births, while older women more often want to limit births. There is no notable difference in the need for family planning between urban and rural women. Unmet need generally declines with increasing education; the more educated the women, the lower the percentage with unmet need. Women with no education and women with some primary school are more likely to be in need of family planning for limiting births, whereas more educated women report a greater need for spacing. Additional motivational and service delivery efforts should be directed toward the *limiting* needs of older and less educated women and the *spacing* needs of younger and more educated women.

The total unmet need levels for the Outer Java-Bali regions are slightly higher than for Java-Bali (see Table 6.6.2). The lower unmet need in Java-Bali might reflect the earlier initiation of family planning efforts in that region. Of the 27 provinces, West Sumatra, East Timor, and Maluku have the highest levels of total unmet need (15 percent or higher), while unmet need in DI Yogyakarta, Bali, and North Sulawesi is less than 6 percent.

Table 6.6.1 Need for family planning services: background characteristics

Percentage of currently married women with unmet need for family planning, and met need for family planning, and the total demand for family planning services, by selected background characteristics, Indonesia 1997

Background characteristic	Unmet need for family planning <sup>1</sup>			Met need for family planning (currently using) <sup>2</sup>			Total demand for family planning <sup>3</sup>			Percentage of demand satisfied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
<b>Age</b>											
15-19	8.6	0.5	9.1	43.6	0.9	44.6	52.6	1.5	54.1	83.2	1,246
20-24	7.9	0.7	8.6	52.3	8.4	60.7	60.9	9.2	70.1	87.7	3,901
25-29	6.2	2.8	9.0	42.3	20.0	62.3	49.6	23.1	72.6	87.6	5,250
30-34	4.8	4.9	9.7	23.5	40.6	64.1	28.8	46.0	74.8	87.1	5,153
35-39	2.1	8.3	10.4	12.1	48.4	60.5	14.5	57.3	71.8	85.6	4,876
40-44	1.0	8.9	9.8	4.5	51.3	55.7	5.7	60.2	66.0	85.1	3,605
45-49	0.1	6.5	6.6	0.6	33.4	34.1	0.8	39.9	40.7	83.7	2,854
<b>Residence</b>											
Urban	3.8	4.7	8.6	23.6	36.2	59.8	28.1	41.2	69.4	87.7	7,428
Rural	4.3	5.1	9.4	25.9	30.6	56.5	30.7	36.0	66.6	85.9	19,457
<b>Region/Residence</b>											
Java-Bali	3.7	4.7	8.5	26.5	34.2	60.6	30.6	39.2	69.9	87.9	16,888
Urban	3.5	4.4	7.9	24.2	36.9	61.1	28.3	41.6	69.9	88.7	5,283
Rural	3.8	4.9	8.7	27.5	33.0	60.4	31.7	38.1	69.8	87.5	11,605
Outer Java-Bali I	5.1	5.2	10.2	23.6	28.6	52.2	29.2	34.1	63.3	83.8	6,983
Urban	5.0	5.4	10.5	21.2	35.6	56.7	27.0	41.5	68.5	84.7	1,494
Rural	5.1	5.1	10.2	24.2	26.7	50.9	29.8	32.1	61.9	83.6	5,489
Outer Java-Bali II	4.9	5.9	10.8	22.4	28.9	51.3	28.0	35.1	63.2	82.9	3,014
Urban	3.8	5.4	9.3	24.4	31.6	56.0	29.3	37.7	67.0	86.2	651
Rural	5.2	6.1	11.2	21.8	28.2	50.0	27.7	34.4	62.1	81.9	2,364
<b>Education</b>											
No education	2.9	6.3	9.1	11.3	32.9	44.2	14.4	39.2	53.6	83.0	3,415
Some primary	3.7	7.7	11.4	19.2	35.5	54.7	23.3	43.5	66.8	83.0	7,304
Completed primary	4.6	4.0	8.6	30.1	30.4	60.5	35.3	34.7	70.0	87.7	8,486
Some secondary+	4.8	2.9	7.7	31.8	30.5	62.3	37.4	33.8	71.2	89.1	7,680
<b>Total</b>	<b>4.2</b>	<b>5.0</b>	<b>9.2</b>	<b>25.2</b>	<b>32.1</b>	<b>57.4</b>	<b>30.0</b>	<b>37.4</b>	<b>67.4</b>	<b>86.4</b>	<b>26,886</b>

<sup>1</sup>Unmet need for *spacing* includes pregnant women whose pregnancy was mistimed, amenorrheic women whose last birth was mistimed, and women who are neither pregnant nor amenorrheic and who are not using any method of family planning and say they want to wait two or more years for their next birth. Also included in unmet need for spacing are women who are unsure whether they want another child or who want another child but are unsure when to have the birth. Unmet need for *limiting* refers to pregnant women whose pregnancy was unwanted, amenorrheic women whose last child was unwanted and women who are neither pregnant nor amenorrheic and who are not using any method of family planning and who want no more children. Excluded from the unmet need category are pregnant and amenorrheic women who became pregnant while using a method (these women are in need of *better contraception*). Also excluded are menopausal or infecund women.

<sup>2</sup>Using for *spacing* is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. Using for *limiting* is defined as women who are using and who want no more children. Note that the specific methods used are not taken into account here.

<sup>3</sup>Total demand includes pregnant or amenorrheic women who became pregnant while using a method (method failure). They account for less than 1 percent of all currently married women.

Within Java-Bali, total unmet need is slightly higher in West Java than in the other provinces; additionally, West Java is the only province in Java-Bali in which total unmet need for family planning (10 percent) exceeds the national average. In the Outer Java-Bali regions, unmet need for limiting and spacing also varies by province. In Southeast Sulawesi and East Timor, for example, most of the unmet need is for spacing births; while in Maluku, on the other hand, the majority of the unmet need is for limiting births.





Table 6.6.2 Need for family planning services: region and province

Percentage of currently married women with unmet need for family planning, and met need for family planning, and the total demand for family planning services, by region and province, Indonesia 1997

Region and province	Unmet need for family planning <sup>1</sup>			Met need for family planning (currently using) <sup>2</sup>			Total demand for family planning <sup>3</sup>			Percentage of demand satisfied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
<b>Java-Bali</b>	3.7	4.7	8.5	26.4	34.2	60.6	30.6	39.2	69.8	87.9	16,888
DKI Jakarta	3.9	4.9	8.9	24.2	34.7	58.9	28.8	40.1	68.9	87.1	1,045
West Java	4.4	5.4	9.8	30.3	27.3	57.6	35.2	32.8	68.0	85.6	5,412
Central Java	3.5	4.8	8.3	26.5	35.9	62.4	30.4	41.1	71.5	88.3	4,367
DI Yogyakarta	2.4	2.2	4.6	22.3	50.7	72.9	25.1	53.4	78.5	94.1	412
East Java	3.4	4.2	7.6	23.9	37.2	61.1	27.7	41.7	69.5	89.0	5,227
Bali	1.9	3.9	5.8	18.2	49.9	68.1	20.3	54.0	74.3	92.3	425
<b>Outer Java-Bali I</b>	5.0	5.2	10.2	23.5	28.7	52.2	29.2	34.2	63.3	83.8	6,983
Dista Aceh	5.8	4.5	10.3	21.1	16.0	37.1	27.0	20.9	47.8	78.4	577
North Sumatra	6.8	6.1	12.9	15.3	30.7	46.0	22.8	37.2	59.9	78.4	1,581
West Sumatra	6.9	9.0	15.9	18.5	26.3	44.8	26.0	36.1	62.1	74.4	503
South Sumatra	3.5	4.3	7.8	27.3	30.5	57.9	31.6	35.2	66.8	88.3	870
Lampung	2.7	4.7	7.4	29.5	37.0	66.5	32.6	42.1	74.6	90.1	880
West Nusa Tenggara	5.8	5.0	10.7	32.0	24.5	56.5	38.2	29.7	67.9	84.2	524
West Kalimantan	3.8	3.6	7.4	25.0	33.2	58.1	29.7	36.9	66.5	88.8	445
South Kalimantan	3.8	3.8	7.5	33.0	27.2	60.2	37.0	31.2	68.2	89.0	389
North Sulawesi	1.4	2.9	4.4	24.8	46.4	71.2	27.0	50.0	77.0	94.3	329
South Sulawesi	6.3	5.4	11.7	22.7	18.8	41.5	29.6	24.2	53.7	78.2	945
<b>Outer Java-Bali II</b>	4.9	5.9	10.8	22.4	29.0	51.4	28.0	35.2	63.2	83.0	3,014
Riau	5.2	7.5	12.7	22.5	25.6	48.1	28.9	33.7	62.6	79.7	450
Jambi	3.0	3.6	6.6	26.4	35.4	61.8	29.9	39.2	69.1	90.4	382
Bengkulu	3.2	4.1	7.4	24.7	41.9	66.6	29.2	46.6	75.8	90.3	181
East Nusa Tenggara	6.6	6.9	13.5	18.5	20.8	39.3	26.5	27.7	54.2	75.1	446
East Timor	11.4	5.9	17.4	14.9	11.8	26.7	26.8	17.8	44.5	61.0	116
Central Kalimantan	3.2	4.6	7.8	27.3	36.0	63.3	30.9	40.6	71.9	89.1	222
East Kalimantan	3.3	4.7	7.9	26.1	33.2	59.3	29.9	38.6	68.5	88.4	345
Central Sulawesi	4.4	5.0	9.4	24.0	27.7	51.7	29.0	32.9	61.8	84.8	251
Southeast Sulawesi	6.1	2.8	8.9	24.8	28.3	53.1	31.4	31.4	62.8	85.8	168
Maluku	4.7	10.6	15.3	12.1	28.0	40.1	17.0	38.6	55.7	72.5	220
Irian Jaya	5.7	7.5	13.6	21.4	29.0	50.4	27.9	36.9	64.7	79.5	233
<b>Total</b>	<b>4.2</b>	<b>5.0</b>	<b>9.2</b>	<b>25.2</b>	<b>32.2</b>	<b>57.4</b>	<b>30.0</b>	<b>37.5</b>	<b>67.4</b>	<b>86.4</b>	<b>26,886</b>

<sup>1</sup>Unmet need for *spacing* includes pregnant women whose pregnancy was mistimed, amenorrheic women whose last birth was mistimed, and women who are neither pregnant nor amenorrheic and who are not using any method of family planning and say they want to wait two or more years for their next birth. Also included in unmet need for spacing are women who are unsure whether they want another child or who want another child but are unsure when to have the birth. Unmet need for *limiting* refers to pregnant women whose pregnancy was unwanted, amenorrheic women whose last child was unwanted and women who are neither pregnant nor amenorrheic and who are not using any method of family planning and who want no more children. Excluded from the unmet need category are pregnant and amenorrheic women who became pregnant while using a method (these women are in need of *better contraception*). Also excluded are menopausal or infecund women.

<sup>2</sup>Using for *spacing* is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. Using for *limiting* is defined as women who are using and who want no more children.

Note that the specific methods used are not taken into account here.

<sup>3</sup>Total demand includes pregnant or amenorrheic women who became pregnant while using a method (method failure). They account for less than 1 percent of all currently married women.

Table 6.6.2 indicates that 86 percent of the demand for family planning services has been met. If all of this need were satisfied, a contraceptive prevalence rate of about 67 percent could, theoretically, be expected. DI Yogyakarta, Bali, Lampung, Jambi, Bengkulu, and North Sulawesi lead the other provinces in fulfilling the demand for family planning (90 percent or more), while West Sumatra, East Nusa Tenggara, East Timor, and Maluku lag behind (75 percent or less).



## 6.4 Unplanned and Unwanted Fertility

In the 1997 IDHS, women were asked a series of questions about each child born in the preceding five years and any current pregnancy, to determine whether the pregnancy was wanted then, wanted but at a later time, or unwanted. These questions form a particularly powerful indicator of the degree to which couples successfully control childbearing. In addition, the data can be used to gauge the effect of the prevention of unwanted births on fertility.

The IDHS questions are extremely demanding. The respondent is required to recall accurately her wishes at one or more points in time during the last five years and to report them honestly. The danger of rationalization is present; an unwanted conception may well have become a cherished child. Despite these potential problems of comprehension, recall and truthfulness, results from previous surveys have proved surprisingly plausible. Respondents clearly are willing to report unwanted conceptions, although some postpartum rationalization probably occurs. The result is more likely an underestimate of unwanted fertility.

Table 6.7 shows the percent distribution of births in the five years preceding the survey and current pregnancies by fertility planning status, according to birth order and mother's age at birth. Eight of ten births were wanted at the time of conception, an additional 9 percent were wanted but at a later time, and only 8 percent were not wanted at all. These findings indicate that women are becoming increasingly successful at planning their families—the proportion of births wanted at the time of conception has increased from 77 percent in 1991 to 82 percent in 1994 and to 83 percent in 1997; the proportion of mistimed births for the corresponding survey years has declined from 16 percent to 10 percent and to 9 percent.

**Table 6.7 Fertility planning status**

Percent distribution of births in the five years preceding the survey and current pregnancies, by fertility planning status, according to birth order and mother's age at birth, Indonesia 1997

Birth order and mother's age at birth	Planning status of birth			Total	Number of births
	Wanted then	Wanted later	Not wanted		
<b>Birth order</b>					
1	94.5	5.0	0.3	100.0	5,896
2	85.2	13.7	1.1	100.0	4,418
3	80.6	9.9	9.5	100.0	2,837
4+	67.9	8.1	24.0	100.0	4,754
<b>Age at birth</b>					
<20	91.1	8.2	0.6	100.0	2,419
20-24	88.9	9.9	1.2	100.0	5,077
25-29	84.5	9.8	5.7	100.0	4,693
30-34	78.3	8.2	13.5	100.0	3,404
35-39	68.3	5.5	26.2	100.0	1,702
40-44	56.0	6.0	37.9	100.0	561
45-49	48.1	8.5	43.4	100.0	50
<b>Total</b>	<b>82.9</b>	<b>8.8</b>	<b>8.3</b>	<b>100.0</b>	<b>17,906</b>

Note: Birth order includes current pregnancy.

Birth order strongly affects the planning status of births. In the 1997 IDHS, the proportion of births that were wanted at the time of conception decreases with increasing birth order, while the percentage not wanted at all increases. While almost all first births were wanted at the time of conception, one in four of fourth or higher order births were unwanted (see Table 6.7).

The planning status of births is also affected by the age of the mother. In general, the older the mother, the smaller the percentage of children who were wanted at conception. The proportion wanted later increases up to age 20-24 years and then decreases. The percentage of births not wanted increases substantially with age. While almost none of the births to women under 20 years were unwanted, 38 percent or more of births to women age 40-49 were not wanted. This level of unwanted births among older women is higher than that reported in the 1994 IDHS (31 percent or more for women age 40-49).

Tables 6.8.1 and 6.8.2 present *wanted* fertility rates. These are calculated in the same manner as conventional age-specific fertility rates, except that only births classified as *wanted* are included in the numerator. A birth is considered wanted if the number of living children at the time of conception was less than or equal to the current ideal number of children reported by the respondent. Wanted fertility rates express the level of fertility that would theoretically result if all unwanted births were prevented. Comparison of actual fertility rates and wanted fertility rates suggests the potential demographic impact of the elimination of unwanted births.

Overall, the total wanted fertility rate is 14 percent lower than the total fertility rate. Thus, if unwanted births could be eliminated, total fertility in Indonesia would be 2.4 births per woman, instead of 2.8. The differences in wanted fertility rates by various background characteristics are similar to those for actual fertility rates. Wanted fertility rates range from as low as less than 2.0 children per woman in DKI Jakarta, DI Yogyakarta, East Java, and Bali to a high of 4.1 children in East Timor. The wanted fertility rate is 3 or more children in North Sumatra, West Sumatra, East Nusa Tenggara, East Timor, and Irian Jaya.

**Table 6.8.1 Wanted fertility rates: background characteristics**

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by selected background characteristics, Indonesia 1997

Background characteristic	Total wanted fertility rate	Total fertility rate
<b>Residence</b>		
Urban	2.0	2.4
Rural	2.6	3.0
<b>Region/Residence</b>		
Java-Bali	2.2	2.6
Urban	1.9	2.3
Rural	2.4	2.8
Outer Java-Bali I	2.7	3.1
Urban	2.2	2.6
Rural	2.9	3.3
Outer Java-Bali II	2.8	3.2
Urban	2.2	2.7
Rural	2.9	3.4
<b>Education</b>		
No education	2.3	2.7
Some primary	2.8	3.2
Completed primary	2.6	3.0
Some secondary +	2.2	2.5
<b>Total</b>	<b>2.4</b>	<b>2.8</b>

Note: Rates are based on births to women 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 3.4.1.

**Table 6.8.2 Wanted fertility rates: region and province**

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by region and province, Indonesia 1997

Region and province	Total wanted fertility rate	Total fertility rate
<b>Java-Bali</b>	2.2	2.6
DKI Jakarta	1.7	2.0
West Java	2.8	3.0
Central Java	2.2	2.6
DI Yogyakarta	1.5	1.8
East Java	1.9	2.3
Bali	1.8	2.1
<b>Outer Java-Bali I</b>	2.7	3.1
Dista Aceh	2.8	3.0
North Sumatra	3.2	3.7
West Sumatra	3.0	3.4
South Sumatra	2.3	2.6
Lampung	2.3	2.9
West Nusa Tenggara	2.5	3.0
West Kalimantan	2.8	3.4
South Kalimantan	2.3	2.6
North Sulawesi	2.3	2.6
South Sulawesi	2.5	2.9
<b>Outer Java-Bali II</b>	2.8	3.2
Riau	2.8	3.4
Jambi	2.6	2.9
Bengkulu	2.5	3.0
East Nusa Tenggara	3.1	3.4
East Timor	4.1	4.4
Central Kalimantan	2.3	2.7
East Kalimantan	2.4	2.8
Central Sulawesi	2.7	3.0
Southeast Sulawesi	2.3	2.9
Maluku	2.8	3.3
Irian Jaya	3.0	3.3
<b>Total</b>	2.4	2.8

Note: Rates are based on births to women 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 3.4.2.





## CHAPTER 7

### NONUSE AND INTENTION TO USE FAMILY PLANNING

This chapter focuses on women who are not using family planning and the reasons women stop using contraceptive methods. Five topics are discussed: contraceptive discontinuation rates, reasons for discontinuing contraception, reasons for nonuse, intention to use contraception in the future, and methods potential users intend to use.

#### 7.1 Discontinuation Rates

Improvement in the quality of contraceptive use is one of the goals of Indonesia's family planning program. One measure of the quality of use is the rate at which users discontinue using a method of contraception. Reasons for discontinuation may include contraceptive failure, dissatisfaction with the method, side effects, and lack of availability. High rates of discontinuation, method failure, and method switching may indicate that improvements are needed in counseling in the selection of methods, follow-up care, and accessibility of services.

Life-table contraceptive discontinuation rates derived from the survey are presented in Table 7.1. These are cumulative first-year discontinuation rates and represent the proportion of users discontinuing a method within 12 months after the start of use. The rates are calculated by dividing the number of discontinuations for each reason at each duration of use in single months by the number of months of exposure at that duration. The single-month rates are then summed to produce a one-year rate. The reasons for discontinuation are treated as competing risks (net rates). Three specific reasons for discontinuation are tabulated: method failure (became pregnant while using contraception), desire to become pregnant, and side effects or health concerns.

Table 7.1 Contraceptive discontinuation rates

First-year contraceptive discontinuation rates due to method failure, desire to become pregnant, health reasons, or other reasons, according to specific methods, Indonesia 1997

Contraceptive method	Reason for discontinuation				
	Method failure	To become pregnant	Health/Side effects	All other reasons	All reasons
Pill	4.1	10.4	11.4	7.9	33.9
IUD	1.4	1.4	7.4	2.1	12.3
Injection	1.6	4.2	12.2	5.5	23.5
Implants	0.1	0.1	2.2	0.5	2.9
Condom	6.3	8.4	0.6	22.3	37.7
Periodic Abstinence	12.5	8.9	0.1	7.4	28.8
Withdrawal	11.6	5.1	0.0	14.7	31.4
Total	2.7	5.7	9.8	5.9	24.1

The rates were calculated from information collected in the calendar portion of the 1997 IDHS individual questionnaire. All episodes of contraceptive use between January 1992 and the date of interview were recorded in the calendar along with the reason for any discontinuation of use during this period. The discontinuation rates presented here refer to all episodes of contraceptive use that began during the period covered by the calendar, not all episodes that occurred during this period. Specifically, the first-year contraceptive discontinuation rates presented in Table 7.1 refer to the period 3-63 months prior to the interview; the month of interview and the preceding two months are ignored in order to avoid bias that may be introduced by unrecognized pregnancies.

Overall, 24 percent of contraceptive users discontinued using a method within 12 months of starting use; 3 percent stopped using because they became pregnant while using the contraceptive method (method failure), 6 percent stopped in order to become pregnant, 10 percent cited side effects or were concerned about health problems, and 6 percent stopped for other reasons (including cost, infrequent sex, and availability of method). The highest overall one-year discontinuation rate is for condom users (37 percent), followed by the pill (34 percent), injection (24 percent), and the IUD (12 percent). The rates of discontinuation for traditional methods are 32 percent for withdrawal and 29 percent for periodic abstinence.

The rates of discontinuation according to specific reasons vary by method. For example, the proportion of users who stopped using because they became pregnant (method failure) is highest for users of traditional methods (12 percent or higher) and low for IUD and injection (1 and 2 percent, respectively). Most discontinuation of pill use is due to side effects, health concerns, or the desire to become pregnant. Health concerns and side effects are also the most important reasons given for discontinuing injection use.

Discontinuation rates have declined somewhat since 1994, except for the pill, which remained constant at 34 percent.

## **7.2 Reasons for Discontinuation of Contraceptive Use**

Another perspective on contraceptive discontinuation is provided by Table 7.2, which shows the percent distribution of discontinuations in the five years preceding the survey by reasons for discontinuation, according to method. The most common reason for discontinuing a method is the desire to become pregnant (34 percent). This applies for all methods, except periodic abstinence and withdrawal, for which the most common reason given for discontinuing is method failure. Other reasons for discontinuing a method are side effects (15 percent), health concerns (16 percent), and method failure (11 percent) (see Figure 7.1). Health concerns and side effects are mentioned frequently for implants and injection (17-20 percent), while method failure is a commonly cited reason for discontinuing traditional methods. The reasons for discontinuing contraceptive methods have changed little since 1994.

## **7.3 Intention To Use Contraception in the Future**

Intention to use contraception in the future provides a forecast of potential demand for family planning services and represents a summary indicator of attitudes toward contraception among current nonusers. The distinction between intention to use in the next 12 months and intention to use later is useful in assessing the extent of demand in the near future. In Indonesia, where the contraceptive prevalence rate is high, nonusers are the group most targeted by family planning programs and providers.

Respondents who were not using any method of contraception at the time of the interview were asked if they intended to use a method at any time in the future. Table 7.3 presents the distribution of currently married women who are not using a contraceptive method by intention to use in the future,



according to number of living children. According to the 1997 IDHS data, 41 percent of nonusers intend to use family planning some time in the future, and 46 percent do not intend to use. The remaining women are unsure about their intentions (14 percent). Among women who intend to use, most intend to use contraception in the next 12 months. Intention to use a family planning method is highest among women with one child; however, women with 2 or 3 children are more likely to want to use contraception within the next 12 months. It is interesting to note that 44 percent of women with no children intend to use family planning some time in the future.

**Table 7.2 Reasons for discontinuation**

Percent distribution of discontinuations of contraceptive methods in the last five years by main reason for discontinuation, according to specific methods, Indonesia 1997

Reason for discontinuation	Method								
	Pill	IUD	Injection	Condom	Implants	Periodic abstinence	Withdrawal	Other methods	All methods
Became pregnant	14.5	12.5	6.8	21.3	0.8	39.3	35.9	29.1	11.4
To become pregnant	37.0	30.4	32.0	21.3	29.4	36.8	29.5	36.1	33.5
Husband disapproved	0.7	0.5	0.3	3.5	0.1	2.0	4.7	1.3	0.6
Side effects	11.7	14.6	19.9	0.2	17.2	0.1	0.4	0.6	15.0
Health concerns	12.3	19.0	19.4	1.8	17.8	2.3	0.0	5.1	15.5
Access/availability	1.1	0.0	1.1	3.1	1.1	0.0	0.0	2.7	1.0
More effective method	9.6	4.4	4.3	8.6	6.8	11.6	16.6	7.0	6.8
Inconvenient to use	1.0	2.2	1.1	20.4	1.7	2.3	8.5	0.0	1.6
Infrequent sex	3.6	1.0	1.6	0.0	1.3	0.2	1.5	2.7	2.2
Cost	0.4	0.4	5.8	4.6	2.8	0.0	0.0	0.7	2.9
Fatalistic	1.0	0.8	0.9	2.6	0.9	0.2	0.0	1.8	0.9
Menopause	1.7	1.8	1.2	1.3	0.8	4.0	0.5	0.0	1.5
Marital dissolution	2.2	2.0	1.9	4.8	3.5	0.3	1.0	2.9	2.2
IUD expelled	0.2	6.1	0.3	0.0	1.9	0.2	0.0	0.4	0.9
Other	3.0	4.0	3.4	6.5	13.8	0.8	1.3	9.1	3.9
Don't know	0.1	0.2	0.0	0.0	0.1	0.0	0.0	0.6	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	4,344	1,114	4,978	147	688	261	180	148	11,884

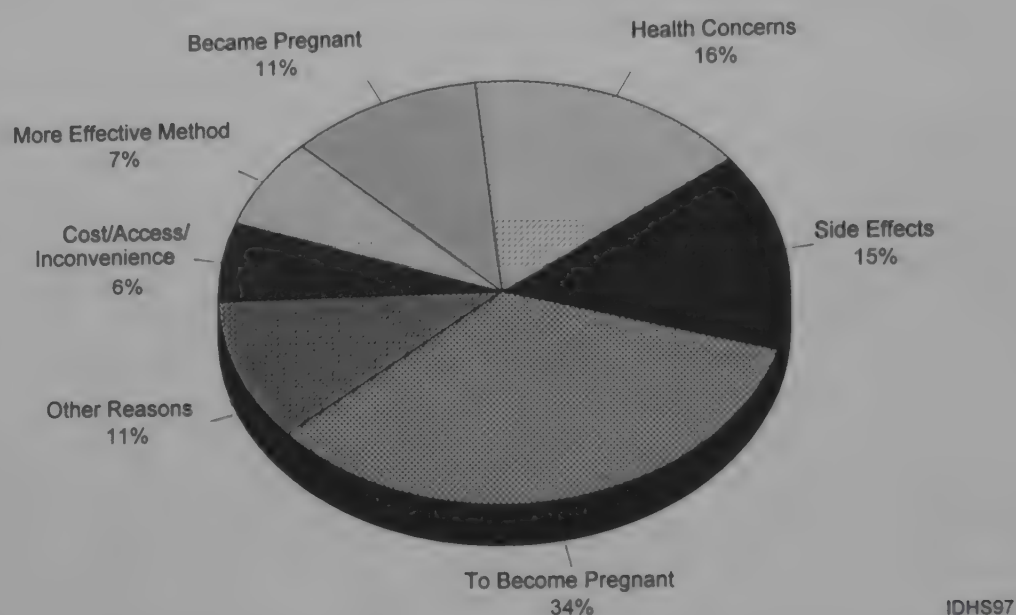
Note: Total includes 23 discontinuations of intravag/diaphragm/foam and 3 discontinuations of male sterilization.

## 7.4 Reasons for Nonuse

One of the best ways of assessing obstacles to family planning programs is to ask women why they are not using a contraceptive method; this was done in the 1997 IDHS. Table 7.4 gives the distribution of currently married nonusers who do not intend to use family planning by reason for not using contraception, according to age.

The major reasons for not intending to use a contraceptive method are the desire to have more children (20 percent) and menopause or having had a hysterectomy (19 percent). As expected, the proportion who do not intend to use because they want to have more children is greater among younger than older women (38 percent for women age 15-29, compared with 17 percent for women age 30-49). Overall, 22 percent of nonusers age 30 and over say that they do not intend to use contraception because they are menopausal or have had a hysterectomy.

**Figure 7.1**  
**Reasons for Discontinuation**  
**of Contraceptive Methods**



**Table 7.3** Future use of contraception

Percent distribution of currently married women who are not using a contraceptive method by intention to use contraception in the future, according to number of living children, Indonesia 1997

Intention to contraception in the future	Number of living children <sup>1</sup>					Total
	0	1	2	3	4+	
Intend to use in next 12 months	12.7	32.7	37.0	32.6	21.4	27.6
Intend to use later	26.1	15.0	9.3	5.2	2.3	10.4
Unsure as to timing	5.6	3.8	2.7	1.6	0.7	2.7
Unsure about use	20.6	14.4	10.4	13.6	11.5	13.5
Do not intend to use	35.0	34.1	40.6	47.1	63.7	45.7
Missing	0.0	0.0	0.0	0.0	0.2	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,532	2,823	2,201	1,675	3,225	11,457

<sup>1</sup>Includes current pregnancy

Fear of side effects and health concerns are the next most commonly cited reasons for nonuse (12 and 11 percent, respectively). Based on this finding, family planning counseling is recommended to eliminate any misunderstandings women may have about methods and to explain more about the possible side effects. This would enable nonusers to make informed choices about the use of contraceptive methods.

**Table 7.4 Reasons for not using contraception**

Percent distribution of currently married women who are not using a contraceptive method and who do not intend to use in the future, by main reason for not using, according to age, Indonesia 1997

Reason for not using contraception	Age		Total
	15-29	30-49	
Infrequent sex	3.0	6.2	5.7
Menopausal/hysterectomy	0.4	22.0	18.8
Subfecund/infecund	0.5	10.9	9.3
Postpartum/breastfeeding	1.6	0.2	0.4
Want children	37.9	16.8	19.9
Respondent opposed	8.9	6.7	7.0
Husband opposed	16.3	6.7	8.2
Others opposed	0.6	0.1	0.1
Religious prohibition	0.3	0.6	0.5
Knows no method	3.3	2.3	2.4
Knows no source	0.1	0.3	0.2
Health concerns	9.3	11.7	11.3
Side effects	13.9	11.6	11.9
Hard to get	0.1	0.2	0.2
Cost	0.8	0.7	0.7
Inconvenient	0.3	0.5	0.5
Interferes with body	0.1	0.5	0.4
Other	0.5	1.3	1.2
Don't know	2.1	0.9	1.1
Total	100.0	100.0	100.0
Number of women	778	4,453	5,231

## 7.5 Preferred Method

Table 7.5 presents data on women who are not currently using family planning but intend to use in the future. An overwhelmingly large proportion of women want to use injection (45 percent), while 26 percent say that they want to use the pill. There is little variation in the potential method choice between women who intend to use in the next 12 months and those who intend to use later.

Comparison of the results of this survey with those of the 1987 NICPS, the 1991 IDHS, and the 1994 IDHS shows that gradually larger proportions of women intend to use injection (from 34 percent in 1987 to 45 percent in 1997), and smaller proportions intend to use the pill (from 40 percent in 1987 to 26 percent in 1997).

**Table 7.5 Preferred method of contraception for future use**

Percent distribution of currently married women who are not using a contraceptive method but who intend to use in the future by preferred method, according to whether they intend to use in the next 12 months or later, Indonesia 1997

Preferred method of contraception	Intend to use			Total
	In next 12 months	After 12 months	Unsure as to timing	
Pill	24.5	28.2	25.1	25.5
IUD	7.1	7.0	7.1	7.1
Injection	45.8	42.6	40.9	44.7
Intravag/Diaphragm/Foam	0.1	0.0	0.0	0.1
Condom	0.1	0.4	0.3	0.2
Implants	8.0	7.6	3.2	7.6
Female sterilization	2.6	1.3	0.3	2.1
Male sterilization	0.1	0.0	0.0	0.1
Periodic abstinence	0.8	1.1	0.3	0.8
Withdrawal	0.4	0.1	0.0	0.3
Other method	1.5	1.5	1.8	1.5
Missing	9.1	10.1	20.9	10.2
Total	100.0	100.0	100.0	100.0
Number of women	3,163	1,188	304	4,655





## CHAPTER 8

### OTHER PROXIMATE DETERMINANTS OF FERTILITY

The principal factors, other than contraception, that affect a woman's risk of becoming pregnant—marriage, sexual intercourse, postpartum amenorrhea, postpartum abstinence from sexual relations, and secondary infertility—are discussed in this chapter. Marriage is a primary indicator of exposure to the risk of pregnancy and is, therefore, important for an understanding of fertility. Low age at first marriage is usually associated with early childbearing and high fertility. Trends in the age at which women marry can help explain trends in fertility levels.

This chapter also presents information on more direct measures of the beginning of exposure to pregnancy and of the level of exposure, such as age at first sexual intercourse and the frequency of intercourse. Other factors that influence the risk of pregnancy, including the duration of postpartum amenorrhea, postpartum abstinence, and secondary infertility are discussed.

In the 1997 IDHS, ever-married women age 15-49 were asked about their current marital status, i.e., whether currently married, divorced, or widowed. Some of the tables in this report are based on data from both ever-married and never-married women. Figures that include never-married women are calculated by multiplying the number of interviewed ever-married women by an inflation factor that is the ratio of all women to ever-married women as reported in the household questionnaire. This procedure expands the denominators of the tables to be representative of all women. The inflation factors are calculated by single years of age and, if results are presented by background characteristics, the single-year inflation factors are calculated separately for each category of the background characteristics.

#### 8.1 Current Marital Status

Table 8.1.1 shows the marital status of women at the time of the survey, by age. Overall, one in four women have never been married, and seven in ten are currently married. The proportion of single women has decreased slightly from that reported in the 1991 IDHS and the 1994 IDHS. In the 1997 IDHS, the

**Table 8.1.1 Current marital status by age**

Percent distribution of the household population of women age 15-49 by current marital status, according to age, Indonesia 1997

Age	Marital status				Total	Number of women
	Never married	Married	Divorced	Widowed		
15-19	82.0	17.1	0.9	0.0	100.0	7,298
20-24	36.1	61.4	2.3	0.2	100.0	6,352
25-29	14.1	82.6	2.6	0.7	100.0	6,358
30-34	5.3	90.8	2.7	1.2	100.0	5,678
35-39	2.4	91.6	3.3	2.8	100.0	5,325
40-44	2.9	87.5	3.9	5.7	100.0	4,122
45-49	1.7	82.6	3.2	12.6	100.0	3,457
Total	25.3	69.7	2.5	2.5	100.0	38,590

Note: Figures may not add to 100.0 due to rounding.

percentage of women who have never married decreases rapidly from 82 percent among teenagers to 36 percent among women age 20-24, while the proportion of divorced women increases gradually with age from 2 percent among women 20-24 to 4 percent among women age 40-44. The proportion of women who are widowed increases steadily with age, from less than 1 percent of women under age 30, to 6 percent of women age 40-44, and then to 13 percent of women age 45-49.

The marital status of women by province is displayed in Table 8.1.2. Among the provinces, the largest proportion of women never married is found in DKI Jakarta (39 percent), while East Java has the lowest proportion (20 percent). On the other hand, the proportion of married women is lowest in DKI Jakarta (55 percent), while the proportion in East Java is highest (74 percent). The percentage of divorced women ranges from less than 1 percent in East Timor to 7 percent in West Nusa Tenggara. DKI Jakarta and East Java also have a high proportion of divorced women—3 percent and 4 percent, respectively. The extent of widowhood also varies across provinces, ranging from 1 percent in North Sulawesi to 4 percent in Dista Aceh, South Kalimantan, and East Nusa Tenggara.

**Table 8.1.2 Current marital status by region and province**

Percent distribution of the household population of women age 15-49 by current marital status, according to region and province, Indonesia 1997

Region and province	Marital status				Total	Number of women
	Never married	Married	Divorced	Widowed		
<b>Java-Bali</b>						
DKI Jakarta	39.2	55.2	3.4	2.3	100.0	1,893
West Java	22.5	73.7	2.4	1.4	100.0	7,347
Central Java	22.6	72.9	2.0	2.5	100.0	5,991
DI Yogyakarta	33.1	62.8	1.8	2.4	100.0	656
East Java	19.5	74.1	3.5	2.9	100.0	7,058
Bali	27.9	69.2	0.8	2.1	100.0	614
<b>Outer Java-Bali</b>						
Dista Aceh	29.2	64.2	2.4	4.1	100.0	807
North Sumatra	29.9	65.8	1.4	3.0	100.0	2,407
West Sumatra	31.2	63.7	2.9	2.2	100.0	789
South Sumatra	28.5	66.1	1.8	3.6	100.0	1,318
Lampung	20.9	76.3	1.5	1.3	100.0	1,154
West Nusa Tenggara	24.9	66.1	6.5	2.4	100.0	793
West Kalimantan	27.5	67.4	2.0	3.1	100.0	660
South Kalimantan	23.9	68.5	3.4	4.2	100.0	568
North Sulawesi	26.9	70.6	1.4	1.0	100.0	465
South Sulawesi	34.1	59.4	3.1	3.5	100.0	1,591
<b>Outer Java-Bali II</b>						
Riau	31.1	65.0	1.3	2.5	100.0	693
Jambi	24.1	69.6	2.6	3.7	100.0	548
Bengkulu	27.1	68.7	2.0	2.1	100.0	263
East Nusa Tenggara	31.2	62.9	2.0	4.0	100.0	710
East Timor	29.3	68.1	0.4	2.1	100.0	171
Central Kalimantan	26.0	69.0	3.2	1.9	100.0	322
East Kalimantan	25.1	71.1	2.5	1.3	100.0	485
Central Sulawesi	28.3	66.6	2.1	3.0	100.0	376
Southeast Sulawesi	33.0	63.3	2.0	1.8	100.0	266
Maluku	32.9	62.8	2.3	2.0	100.0	351
Irian Jaya	26.7	70.7	1.3	1.2	100.0	330
<b>Total</b>	<b>25.3</b>	<b>69.7</b>	<b>2.5</b>	<b>2.5</b>	<b>100.0</b>	<b>38,590</b>



## 8.2 Age at First Marriage

Table 8.2 shows the percentage of women ever married by selected exact ages and median age at first marriage, according to current age. There is a substantial increase in age at first marriage across cohorts. One in five women age 45-49 was married by age 15, compared with 14 percent of women age 30-34 and with less than 6 percent of women age 20-24. Similarly, while 7 in 10 women age 40 and older were married by age 20, less than half of the women age 20-24 were married by age 20.

**Table 8.2 Age at first marriage**

Percentage of women who were first married by exact age 15, 18, 20, 22, and 25, and median age at first marriage, according to current age, Indonesia 1997

Current age	Percentage of women who were first married by exact age:					Percentage not/never married	Number of women	Median age at first marriage
	15	18	20	22	25			
15-19	3.3	NA	NA	NA	NA	82.0	7,298	<sup>a</sup>
20-24	5.8	29.6	47.0	NA	NA	36.1	6,352	<sup>a</sup>
25-29	10.7	33.3	51.0	65.4	80.2	14.1	6,358	19.9
30-34	14.1	42.3	60.1	72.4	84.7	5.3	5,678	18.8
35-39	17.8	48.5	67.5	80.4	89.3	2.4	5,325	18.1
40-44	18.3	49.2	67.3	79.7	89.2	2.9	4,122	18.1
45-49	22.8	55.9	70.9	82.2	90.9	1.7	3,457	17.3
20-49	13.9	41.4	59.1	71.8	81.7	12.0	31,292	18.9
25-49	15.9	44.4	62.1	75.0	86.2	5.9	24,940	18.6

NA = Not applicable

<sup>a</sup> Omitted because less than 50 percent of the women in the age group  $x$  to  $x + 4$  were first married by age  $x$ .

The median age at first marriage is defined as the age by which 50 percent of women in the age group  $x$  to  $x+4$  have been married. For example, 50 percent of women age 25-29 were married by age 19.9. The median age at first marriage has increased from 17.3 years among women in the oldest age cohort to 19.9 years among those age 25-29. Between 1994 and 1997, the median age at first marriage among women age 25-49 increased from 18.1 to 18.6 years (CBS et al., 1995).

Large differences in age at first marriage according to women's residence and level of education can be seen in Table 8.3.1 For all age cohorts, urban women marry at least two years later than their rural counterparts; this pattern applies throughout the country. A large difference can be found in the younger age group. For urban women age 25-29, the median age at first marriage is 22.7 years, whereas the figure for rural women is 18.9 years. The difference between women with some secondary education and all other women is especially pronounced. Overall, women who have attended secondary school marry at least five years later than women with less than completed primary education. Among women with some secondary education, the median age at first marriage is 22 years, whereas for women with less than primary education the median age at first marriage is 17 years or younger. In general, the gap between women with secondary schooling and other women is larger among younger women.

Table 8.3.1 Median age at first marriage: background characteristics

Median age at first marriage among women age 25-49 years, by current age and selected background characteristics, Indonesia 1997

Background characteristic	Current age					Women age 25-49
	25-29	30-34	35-39	40-44	45-49	
<b>Residence</b>						
Urban	22.7	21.1	19.2	19.6	18.3	20.4
Rural	18.9	18.1	17.7	17.5	16.9	17.9
<b>Region/Residence</b>						
Java-Bali	19.6	18.3	17.6	17.8	16.8	18.1
Urban	22.5	20.4	18.7	19.4	18.2	20.0
Rural	18.3	17.5	17.1	17.0	16.1	17.3
Outer Java-Bali I	20.3	19.8	18.9	18.6	17.9	19.2
Urban	23.2	22.9	20.6	20.9	18.4	21.4
Rural	19.6	18.9	18.6	18.1	17.7	18.7
Outer Java-Bali II	20.5	19.7	19.4	18.8	19.5	19.7
Urban	22.4	21.8	20.5	19.6	20.0	21.1
Rural	19.9	19.0	19.1	18.6	19.4	19.2
<b>Education</b>						
No education	17.4	17.0	17.0	17.2	16.1	16.9
Some primary	17.3	17.4	17.5	17.2	16.7	17.3
Completed primary	18.5	18.0	17.9	17.8	17.4	18.0
Some secondary+	22.7	22.7	21.4	20.9	20.5	22.0
<b>Total</b>	<b>19.9</b>	<b>18.8</b>	<b>18.1</b>	<b>18.1</b>	<b>17.3</b>	<b>18.6</b>

Note: The medians for women 15-19 and 20-24 could not be determined because less than 50 percent of the women were first married by age 15 and 20, respectively.

Women in Java-Bali marry more than one year earlier than women in outer islands. The median age at first marriage is 18.1 years in Java-Bali, compared with 19.2 years in Outer Java-Bali I, and 19.7 years in Outer Java-Bali II (Figure 8.1).

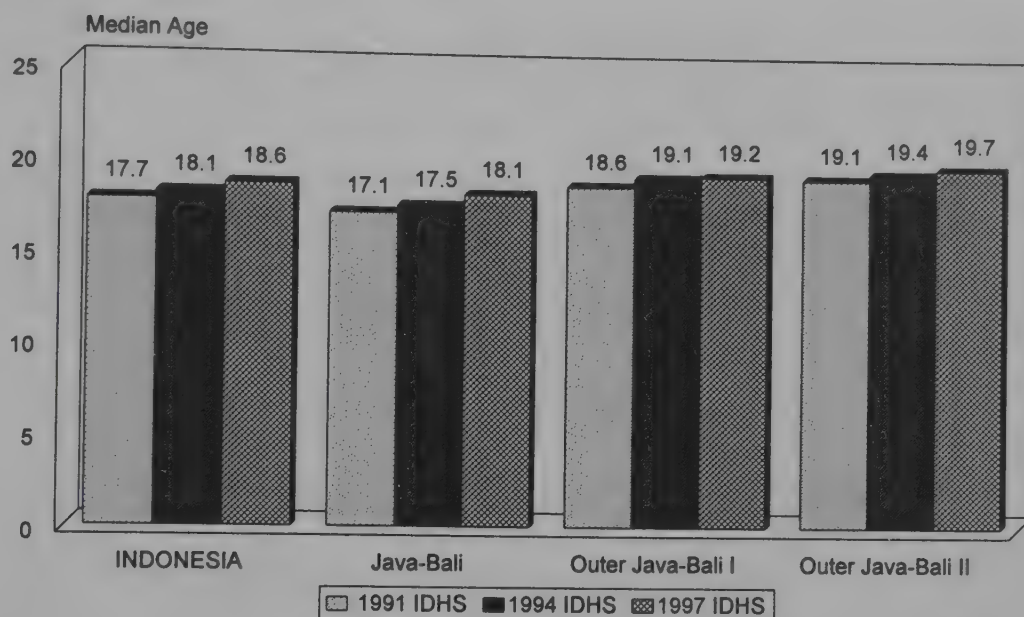
There is a great deal of variation in the median age at first marriage by province (Table 8.3.2). In Java-Bali, the median age at first marriage for women 25-49 ranges from 17.4 years in West Java to almost 20.7 years in DI Yogyakarta (Figure 8.2). While in the Outer Java-Bali regions, the corresponding figure ranges from 17.5 years in Lampung to 21 or older in North Sulawesi, East Nusa Tenggara, East Timor, and Maluku. Since 1987, the median age at first marriage has increased in most provinces. However, a few provinces have shown slight declines from the median recorded in the 1994 IDHS, such as North Sumatra, West Nusa Tenggara, and Central Kalimantan.

### 8.3 Age at First Sexual Intercourse

IDHS respondents who were currently married were asked at what age they first had sexual intercourse. This information is presented in Table 8.4. In the table, divorced and widowed women are assigned an age at first intercourse equal to that of the last currently married women in the data file who got married at the same age, while never-married women are assumed not to have had sexual intercourse. For Indonesia as a whole, less than 6 percent of women age 25-49 reported never having had sexual intercourse, 15 percent of women had had intercourse by age 15, and by age 18 this figure rises to 44 percent. The patterns shown in this table are almost identical to those for age at first marriage (Table 8.2), indicating that, for most women, first sexual intercourse occurs at the time of first marriage.



**Figure 8.1**  
**Median Age at First Marriage by Region**  
**Indonesia, 1991, 1994 and 1997**



The differentials in age at first sexual intercourse (see Table 8.5.1) are similar to the differentials in age at first marriage. Rural women, women in Java-Bali, and women with less than secondary education have first sexual intercourse at an earlier age than other women.

In West Java, women age 25-49 have first sexual intercourse at an earlier age (17.4 years) than women in other provinces in the country (Table 8.5.2). Within Outer Java-Bali I, women in Lampung have their first sexual intercourse at an earlier age (17.5 years) than women in the other provinces, and within Outer Java-Bali II, women in Jambi have the lowest median age at first sexual intercourse (18.0 years). East Timor has the highest median age at first sexual intercourse (21.2 years).

#### 8.4 Recent Sexual Activity

In the absence of contraception, the probability of pregnancy is related to the frequency of sexual intercourse. Thus, information on intercourse is important for refining the measurement of exposure to pregnancy. Several questions in the 1997 IDHS covered the topic of recent sexual intercourse. For example, currently married women were asked how long ago they had last had sexual intercourse and how many times they had had sex in the last 4 weeks.

Tables 8.6.1 and 8.6.2 present the results of the question on time since last intercourse. The data allow an assessment of the level of sexual activity according to age, marital duration, and other background characteristics. Overall, 82 percent of married women were sexually active in the month preceding the survey, 4 percent were postpartum abstaining, and 14 percent were not sexually active for reasons other than a recent birth (e.g., spousal separation, illness). The proportion sexually active and the proportion postpartum abstaining declines as age and marital duration increase. At the same time, the proportion not sexually active for other reasons increases with increasing age and duration of marriage.



**Table 8.3.2 Median age at first marriage: region and province**

Median age at first marriage among women age 25-49 years, by current age and region and province, Indonesia 1997

Region and province	Current age					Women age 25-49
	25-29	30-34	35-39	40-44	45-49	
<b>Java-Bali</b>	19.6	18.3	17.6	17.8	16.8	18.1
DKI Jakarta	23.2	20.9	19.4	20.0	18.6	20.6
West Java	18.2	17.5	16.8	17.5	15.9	17.4
Central Java	20.1	18.7	17.8	17.9	18.1	18.5
DI Yogyakarta	23.0	21.3	20.2	20.0	18.8	20.7
East Java	19.5	18.0	17.5	17.4	15.9	17.8
Bali	21.9	20.5	20.0	19.9	19.3	20.5
<b>Outer Java-Bali I</b>	20.3	19.8	18.9	18.6	17.9	19.2
Dista Aceh	19.8	18.7	18.7	18.0	17.1	18.5
North Sumatra	21.0	21.1	20.2	19.2	18.2	20.1
West Sumatra	22.7	21.4	19.1	19.1	17.6	20.3
South Sumatra	20.7	19.9	18.8	18.5	17.7	19.1
Lampung	18.0	17.6	17.4	17.2	16.8	17.5
West Nusa Tenggara	18.7	18.2	18.0	17.8	17.6	18.1
West Kalimantan	19.8	19.0	19.7	18.2	17.9	19.1
South Kalimantan	19.4	17.7	17.7	16.8	16.3	17.7
North Sulawesi	20.9	21.3	20.1	21.4	21.6	21.0
South Sulawesi	20.9	21.4	19.1	19.0	18.4	19.8
<b>Outer Java-Bali II</b>	20.5	19.7	19.4	18.8	19.5	19.7
Riau	21.2	19.3	18.9	17.9	17.9	19.1
Jambi	18.7	17.4	18.2	17.1	18.3	18.0
Bengkulu	18.9	18.2	17.7	17.4	17.9	18.1
East Nusa Tenggara	22.5	21.5	21.3	20.4	21.0	21.4
East Timor	21.2	20.7	21.0	23.4	24.5	21.5
Central Kalimantan	19.0	18.9	19.0	18.5	19.3	18.9
East Kalimantan	20.8	20.4	18.8	17.7	17.0	19.4
Central Sulawesi	20.1	19.9	20.1	19.3	19.9	19.8
Southeast Sulawesi	19.7	19.4	18.4	18.5	18.9	19.0
Maluku	21.0	20.9	21.0	21.6	22.8	21.2
Irian Jaya	19.9	18.8	18.4	19.0	20.4	19.2
<b>Total</b>	<b>19.9</b>	<b>18.8</b>	<b>18.1</b>	<b>18.1</b>	<b>17.3</b>	<b>18.6</b>

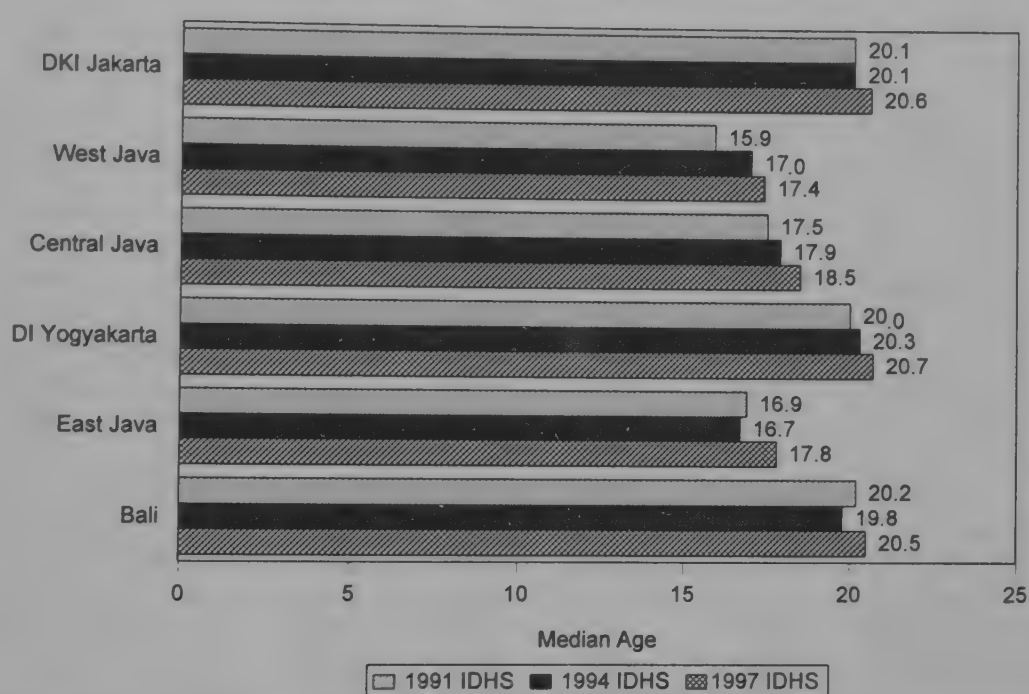
Note: The medians for women 15-19 and 20-24 could not be determined because less than 50 percent of the women were first married by age 15 and 20, respectively.

Urban women are slightly more likely to be sexually active than rural women (Table 8.6.2). Sexual activity in the month preceding the survey is associated with women's education. Women with no education are less likely to be sexually active than educated women, because of the greater proportion of less educated women among those abstaining for reasons other than a recent birth.

Among contraceptive users, the proportion of women who are sexually active varies little according to the method they are using (from 83 to 93 percent). However, women who are not using any method of family planning are less likely to be sexually active than those who are using a method. Among women who

were not using family planning, 74 percent had had sex in the month prior to the survey, 7 percent were postpartum abstaining, and 19 percent were abstaining for other reasons.

**Figure 8.2**  
**Median Age at First Marriage by Province,**  
**Java-Bali 1991, 1994 and 1997**



**Table 8.4** Age at first sexual intercourse

Percentage of women who had first sexual intercourse by exact age 15, 18, 20, 22, and 25, and median age at first intercourse, according to current age, Indonesia 1997

Current age	Percentage of women who had first intercourse by exact age:					Percentage who never had intercourse	Number of women	Median age at first intercourse
	15	18	20	22	25			
15-19	3.3	NA	NA	NA	NA	82.0	7,298	a
20-24	5.9	29.6	47.0	NA	NA	36.1	6,352	a
25-29	10.9	33.5	51.3	65.7	79.9	14.1	6,358	19.8
30-34	14.1	42.6	60.4	72.3	84.2	5.3	5,678	18.8
35-39	17.3	48.3	67.2	80.1	89.0	2.4	5,325	18.2
40-44	17.1	48.7	66.8	79.0	88.7	2.9	4,122	18.1
45-49	20.6	54.6	70.2	81.7	90.5	1.7	3,457	17.5
20-49	13.5	41.2	59.0	71.6	81.3	12.0	31,292	18.9
25-49	15.4	44.2	62.0	74.6	85.7	5.9	24,940	18.6

Note: Divorced and widowed women are assigned an age at first intercourse that is the same as that of the last currently married women in the data file who got married at the same age. Never-married women are assumed to have not had intercourse.

NA = Not applicable

<sup>a</sup> Median was not calculated because less than 50 percent of the women in the group  $x$  to  $x + 4$  had had intercourse by age  $x$ .

**Table 8.5.1 Median age at first intercourse: background characteristics**

Median age at first sexual intercourse among women age 25-49 years, by current age and selected background characteristics, Indonesia 1997

Background characteristic	Current age					Women age 25-49
	25-29	30-34	35-39	40-44	45-49	
<b>Residence</b>						
Urban	22.6	21.0	19.2	19.6	18.4	20.4
Rural	18.8	18.0	17.8	17.5	17.1	18.0
<b>Region/Residence</b>						
Java-Bali	19.6	18.3	17.7	17.9	17.1	18.2
Urban	22.5	20.4	18.7	19.3	18.3	20.1
Rural	18.3	17.6	17.2	17.2	16.6	17.5
Outer Java-Bali I	20.2	19.7	18.9	18.4	17.8	19.1
Urban	23.3	22.7	20.7	20.8	18.2	21.4
Rural	19.5	18.9	18.5	17.9	17.7	18.6
Outer Java-Bali II	20.3	19.5	19.2	18.6	19.3	19.5
Urban	22.3	21.7	20.4	19.3	19.8	20.9
Rural	19.7	18.9	18.9	18.5	19.2	19.1
<b>Education</b>						
No education	17.5	17.0	17.0	17.4	16.6	17.0
Some primary	17.3	17.4	17.5	17.3	16.9	17.3
Completed primary	18.4	18.0	17.8	17.7	17.6	18.0
Some secondary +	22.6	22.7	21.4	20.9	20.5	22.0
<b>Total</b>	19.8	18.7	18.2	18.1	17.5	18.6

Although there are small differences between regions in the proportion of women who were sexually active in the four weeks preceding the survey, there are substantial variations by province. Proportions range from a low of 70 percent in Central Java to a high of 92 percent in Bali and East Timor. The low proportion of women who are sexually active in Central Java corresponds to the high proportion of women who are abstaining for other reasons, such as temporary separation.

## 8.5 Postpartum Amenorrhea, Abstinence and Insusceptibility

Among women who are not using contraception, exposure to the risk of pregnancy in the period following a birth is influenced by two factors—breastfeeding and sexual abstinence. Postpartum protection from conception can be prolonged by breastfeeding, which can lengthen the duration of amenorrhea, and by delaying the resumption of sexual relations.

Table 8.7 shows the percentage of births for which mothers are postpartum amenorrheic, abstaining, and postpartum insusceptible by the number of months since the birth. Women who are insusceptible are defined as those who are either amenorrheic or abstaining following a birth and, thus, are not exposed to the risk of pregnancy. The estimates shown in Tables 8.7, 8.8.1 and 8.8.2 are based on current status data. That is, they refer to whether or not the woman was amenorrheic or abstaining at the time of the survey. All births occurring during the three years prior to the survey are included. Table 8.7 uses cross-sectional data,



representing all women at a single point in time, rather than showing the experience of an actual cohort over time. For this reason, the proportions at increasing duration do not always decline smoothly. Such fluctuations have been reduced by grouping the births in two-month intervals.

**Table 8.5.2 Median age at first intercourse: region and province**

Median age at first sexual intercourse among women age 25-49 years, by current age and region and province, Indonesia 1997

Region and province	Current age					Women age 25-49
	25-29	30-34	35-39	40-44	45-49	
<b>Java-Bali</b>	19.6	18.3	17.7	17.9	17.1	18.2
DKI Jakarta	23.1	20.8	19.3	19.9	18.8	20.6
West Java	18.2	17.4	17.0	17.5	16.0	17.4
Central Java	20.1	18.7	17.8	18.0	18.3	18.6
DI Yogyakarta	23.0	21.3	20.4	20.1	19.3	20.8
East Java	19.5	18.0	17.7	17.9	16.5	17.9
Bali	21.7	20.5	19.9	19.7	19.2	20.4
<b>Outer Java-Bali I</b>	20.2	19.7	18.9	18.4	17.8	19.1
Dista Aceh	19.8	18.5	18.7	18.0	17.1	18.4
North Sumatra	20.9	21.0	20.2	19.0	18.2	20.0
West Sumatra	22.8	21.4	19.0	19.0	17.5	20.2
South Sumatra	20.8	19.9	18.7	18.3	17.5	19.0
Lampung	18.0	17.5	17.4	17.1	16.8	17.5
West Nusa Tenggara	18.7	18.2	18.0	17.7	17.5	18.1
West Kalimantan	19.6	19.0	19.6	18.1	17.9	19.0
South Kalimantan	19.3	17.7	17.7	16.8	16.3	17.7
North Sulawesi	20.7	21.1	19.8	21.0	21.1	20.6
South Sulawesi	20.8	21.7	19.2	18.9	18.4	19.9
<b>Outer Java-Bali II</b>	20.3	19.5	19.2	18.6	19.3	19.5
Riau	21.1	19.3	18.8	18.0	17.9	19.1
Jambi	18.7	17.3	18.0	16.8	18.2	18.0
Bengkulu	18.9	18.1	17.6	17.5	17.9	18.1
East Nusa Tenggara	21.9	21.1	20.9	19.8	20.8	21.0
East Timor	21.0	20.4	20.8	23.1	23.9	21.2
Central Kalimantan	19.0	18.8	18.9	18.4	19.3	18.9
East Kalimantan	20.9	20.4	18.9	17.7	17.0	19.4
Central Sulawesi	20.1	19.7	19.9	19.3	19.8	19.7
Southeast Sulawesi	19.6	19.5	18.4	18.5	18.9	19.0
Maluku	20.4	20.0	20.3	20.7	21.0	20.4
Irian Jaya	19.5	18.7	18.2	18.8	20.4	18.9
<b>Total</b>	19.8	18.8	18.2	18.1	17.5	18.6

The percentage of women who are still amenorrheic is 64 percent at 2 to 3 months after birth, 48 percent at 6 to 7 months, and 31 percent at 12 to 13 months (Figure 8.3). From the table, it can be seen that there is a rapid drop in postpartum abstinence; while 42 percent of women are still abstaining from sexual relations 2-3 months after a birth, only about 4 percent are abstaining after a year. Overall, half of the women are susceptible to the risk of pregnancy 7-8 months after the birth of a child (excluding contraceptive use).

Table 8.6.1 Recent sexual activity: background characteristics

Percent distribution of currently married women by sexual activity in the four weeks preceding the survey, and among those who were not sexually active, the length of time they had been postpartum abstaining or were abstaining for other reasons, according to selected background characteristics and contraceptive method currently used, Indonesia 1997

Background characteristic/ Contraceptive method	Sexually active in last 4 weeks	Not sexually active in last 4 weeks						Number of women
		Postpartum abstaining		Abstaining for other reason		Missing	Total	
		0-1 years	2+ years	0-1 years	2+ years			
<b>Age</b>								
15-19	89.5	5.5	0.1	4.5	0.1	0.3	100.0	1,246
20-24	85.1	6.3	0.2	8.0	0.3	0.1	100.0	3,901
25-29	85.9	4.7	0.0	8.7	0.4	0.3	100.0	5,250
30-34	84.6	4.0	0.3	10.3	0.8	0.1	100.0	5,153
35-39	82.6	2.5	0.2	13.3	1.2	0.2	100.0	4,876
40-44	78.9	1.0	0.3	18.0	1.8	0.1	100.0	3,605
45-49	65.9	0.5	0.0	28.5	4.9	0.2	100.0	2,854
<b>Duration of marriage (years)</b>								
0-4	85.1	6.7	0.1	7.5	0.3	0.3	100.0	4,935
5-9	86.5	4.4	0.3	8.4	0.2	0.2	100.0	4,931
10-14	85.5	3.7	0.1	9.7	0.8	0.2	100.0	4,336
15-19	84.5	2.7	0.3	11.4	1.1	0.0	100.0	4,637
20-24	79.7	1.8	0.1	16.5	1.6	0.3	100.0	3,766
25-29	74.9	0.8	0.2	21.7	2.4	0.1	100.0	2,687
30+	60.2	0.8	0.0	32.6	6.1	0.3	100.0	1,593
<b>Residence</b>								
Urban	84.6	2.7	0.1	11.6	0.9	0.1	100.0	7,428
Rural	81.1	3.8	0.2	13.4	1.4	0.2	100.0	19,457
<b>Region/Residence</b>								
Java-Bali	80.0	3.4	0.2	14.8	1.4	0.2	100.0	16,888
Urban	83.8	2.4	0.1	12.7	0.9	0.1	100.0	5,283
Rural	78.3	3.9	0.2	15.7	1.7	0.3	100.0	11,605
Outer Java-Bali I	86.1	3.5	0.1	9.4	0.9	0.0	100.0	6,983
Urban	87.1	3.4	0.1	8.6	0.8	0.0	100.0	1,494
Rural	85.8	3.5	0.1	9.7	0.9	0.0	100.0	5,489
Outer Java-Bali II	84.2	4.0	0.3	10.3	0.9	0.2	100.0	3,014
Urban	86.0	3.2	0.0	9.3	1.2	0.3	100.0	651
Rural	83.8	4.2	0.3	10.6	0.9	0.2	100.0	2,364
<b>Education</b>								
No education	72.9	2.6	0.3	20.6	3.2	0.4	100.0	3,415
Some primary	79.3	3.3	0.3	15.3	1.7	0.0	100.0	7,304
Completed primary	83.3	3.8	0.1	11.8	0.7	0.2	100.0	8,486
Some secondary+	87.3	3.7	0.0	8.2	0.5	0.2	100.0	7,680
<b>Contraceptive method</b>								
No method	74.2	6.7	0.2	16.2	2.4	0.2	100.0	11,447
Pill	90.2	0.5	0.0	8.9	0.1	0.2	100.0	4,153
IUD	83.5	0.8	0.4	14.5	0.7	0.2	100.0	2,191
Sterilization	82.9	1.1	0.0	13.7	2.3	0.0	100.0	899
Periodic abstinence	92.7	1.2	0.0	4.7	0.1	1.2	100.0	297
Other	88.2	1.5	0.2	9.8	0.2	0.1	100.0	7,898
Total	82.1	3.5	0.2	12.9	1.2	0.2	100.0	26,886

The median duration of postpartum amenorrhea, abstinence, and insusceptibility, by various background characteristics of women, are shown in Table 8.8.1. Women less than 30 years of age and urban women are amenorrheic for a shorter period than women over age 30 and rural women, although the period

of abstinence is similar. The duration of amenorrhea in the three major regions varied little, ranging from 5.2 months in the Outer Java-Bali II region to 6.0 months in Java-Bali. Education has an inverse relationship to the duration of amenorrhea. Women with no education are amenorrheic almost three times as long (11.6 months) as women with some secondary education (3.3 months). The difference is largely due to longer breastfeeding among rural and older women (see Chapter 13).

Table 8.6.2 Recent sexual activity: region and province

Percent distribution of currently married women by sexual activity in the four weeks preceding the survey, and among those who were not sexually active, the length of time they had been postpartum abstaining or were abstaining for other reasons, according to region and province, Indonesia 1997

Region and province	Sexually active in last 4 weeks	Not sexually active in last 4 weeks				Missing	Total	Number of women
		Postpartum abstaining		Abstaining for other reasons				
		0-1 years	2+ years	0-1 years	2+ years			
<b>Java-Bali</b>	80.0	3.4	0.2	14.8	1.4	0.2	100.0	16,888
DKI Jakarta	85.0	2.6	0.1	11.0	1.1	0.1	100.0	1,045
West Java	86.9	2.6	0.1	9.6	0.6	0.2	100.0	5,412
Central Java	69.6	4.2	0.1	24.1	1.7	0.2	100.0	4,367
DI Yogyakarta	79.5	2.5	1.4	14.5	2.0	0.0	100.0	412
East Java	79.6	4.0	0.2	13.7	2.2	0.2	100.0	5,227
Bali	91.7	1.3	0.0	6.5	0.5	0.0	100.0	425
<b>Outer Java-Bali I</b>	86.1	3.5	0.1	9.4	0.9	0.0	100.0	6,983
Dista Aceh	91.4	5.0	0.0	3.1	0.5	0.0	100.0	517
North Sumatra	85.6	4.0	0.0	9.8	0.6	0.0	100.0	1,581
West Sumatra	82.2	5.3	0.1	11.1	1.1	0.0	100.0	503
South Sumatra	87.2	3.1	0.0	8.7	0.9	0.0	100.0	870
Lampung	87.4	3.4	0.1	8.3	0.8	0.0	100.0	880
West Nusa Tenggara	85.5	3.4	0.7	7.7	2.6	0.1	100.0	524
West Kalimantan	74.8	3.1	0.0	20.7	0.9	0.5	100.0	445
South Kalimantan	89.4	2.1	0.1	7.8	0.5	0.0	100.0	389
North Sulawesi	90.3	1.7	0.0	7.7	0.3	0.0	100.0	329
South Sulawesi	86.3	2.9	0.0	10.2	0.6	0.0	100.0	945
<b>Outer Java-Bali II</b>	84.2	4.0	0.3	10.3	0.9	0.2	100.0	3,014
Riau	80.7	3.6	0.3	14.2	1.0	0.2	100.0	450
Jambi	87.6	3.1	0.1	8.5	0.4	0.4	100.0	382
Bengkulu	86.8	2.9	0.1	10.0	0.2	0.0	100.0	181
East Nusa Tenggara	78.7	5.4	0.5	13.3	2.0	0.1	100.0	446
East Timor	91.9	4.8	0.0	2.9	0.0	0.4	100.0	116
Central Kalimantan	89.4	1.9	0.1	7.6	0.5	0.4	100.0	222
East Kalimantan	81.7	3.8	0.1	13.3	1.1	0.1	100.0	345
Central Sulawesi	88.4	3.5	0.0	6.9	0.9	0.4	100.0	251
Southeast Sulawesi	82.8	4.7	0.0	10.5	1.7	0.3	100.0	168
Maluku	87.2	4.5	0.1	7.5	0.5	0.1	100.0	220
Irian Jaya	83.1	5.5	1.3	8.9	0.8	0.4	100.0	233
Total	82.1	3.5	0.2	12.9	1.2	0.2	100.0	26,886

The combined effect of amenorrhea and abstinence is reflected in the median duration of insusceptibility, which is shown in Table 8.8.1 and Table 8.8.2. Women under 30 years of age are insusceptible to the risk of pregnancy almost 4 months less than women 30 years and over (5.8 months versus 9.5 months); the corresponding periods for urban and rural women are 4.0 and 9.3 months, respectively. Women with less education are insusceptible for a longer period than more educated women (12.2 months for women with no education and 4.4 months for women with some secondary education).



Table 8.7 Postpartum amenorrhea, abstinence and insusceptibility

Percentage of births in the three years preceding the survey for which mothers are postpartum amenorrheic, abstaining and insusceptible, by number of months since birth, and median and mean durations, Indonesia 1997

Months since birth	Percentage of births for which mothers are:			Number of births
	Amenor-rheic	Abstaining	Insus-ceptible	
< 2	95.4	93.8	98.2	445
2-3	64.4	41.8	73.6	613
4-5	49.1	14.4	54.0	541
6-7	48.3	14.1	54.6	595
8-9	43.3	7.0	46.3	513
10-11	39.4	7.1	42.4	582
12-13	30.5	3.8	31.6	576
14-15	19.2	4.0	22.7	536
16-17	21.1	3.6	23.3	609
18-19	18.6	3.5	20.9	501
20-21	12.4	3.1	15.3	520
22-23	15.9	2.6	18.5	480
24-25	9.8	1.9	11.6	543
26-27	7.0	1.1	8.0	630
28-29	11.0	1.6	12.0	550
30-31	8.7	0.8	9.6	493
32-33	5.7	0.8	6.4	510
34-35	6.8	1.3	8.1	447
Total	28.2	11.0	31.1	9,685
Median	5.7	2.4	7.5	NA
Mean	10.4	4.4	11.4	NA
Prevalence/ Incidence mean <sup>1</sup>	10.0	3.9	11.0	NA

NA = Not applicable

<sup>1</sup>The prevalence-incidence mean is borrowed from epidemiology and is defined as the number of children whose mothers are amenorrheic (prevalence) divided by the average number of births per month (incidence).

Table 8.8.2 presents the differentials in postpartum amenorrhea by region and province. Postpartum amenorrhea ranges from less than 3 months in DKI Jakarta and Irian Jaya to more than 10 months or longer in Central Java, East Nusa Tenggara, and East Timor.

Differences in the duration of abstinence tend to be less pronounced than those in amenorrhea. In almost all groups, women abstain for 2 to 3 months following a birth. In DI Yogyakarta, East Java, Lampung, and Maluku, the duration of abstinence is somewhat longer—more than 3 months. Regional differences in the duration of insusceptibility generally replicate the differences in the duration of amenorrhea. The median duration of insusceptibility for women in Central Java, East Java, East Nusa Tenggara, and East Timor is 10 or more months, which is caused by the long duration of postpartum amenorrhea, and in East Java by the period of abstinence.

**Table 8.8.1 Median duration of postpartum amenorrhea, abstinence, and insusceptibility: background characteristics**

For births in the three years preceding the survey, the median number of months mothers are postpartum amenorrheic, postpartum abstaining, and postpartum insusceptible, by selected background characteristics, Indonesia 1997

Background characteristic	Median number of months mothers are:			Number of births
	Postpartum amenorrheic	Postpartum abstaining	Postpartum insusceptible	
<b>Age</b>				
<30	4.3	2.3	5.8	5,908
30+	8.4	2.7	9.4	3,776
<b>Residence</b>				
Urban	3.2	2.3	4.0	2,693
Rural	7.5	2.4	9.3	6,992
<b>Region/Residence</b>				
Java-Bali	6.0	2.4	9.2	5,470
Urban	2.5	2.3	3.8	1,817
Rural	10.6	2.5	11.7	3,653
Outer Java-Bali I	5.6	2.3	6.1	2,897
Urban	4.5	2.3	4.9	609
Rural	5.9	2.3	6.4	2,288
Outer Java-Bali II	5.2	2.4	6.0	1,317
Urban	3.9	2.4	4.1	267
Rural	5.7	2.4	6.5	1,051
<b>Education</b>				
No education	11.6	2.9	12.2	817
Some primary	10.5	2.5	11.4	2,316
Completed primary	5.4	2.4	7.7	3,206
Some secondary+	3.3	2.3	4.4	3,346
<b>Total</b>	<b>5.7</b>	<b>2.4</b>	<b>7.4</b>	<b>9,685</b>

Note: Medians are based on current status.

## 8.6 Termination of Exposure

Two measures of exposure—menopause and long-term abstinence—are shown in Table 8.9. Menopause is an indicator of secondary infertility—the proportion of non-pregnant, non-amenorrheic currently married women whose last menstrual period occurred 6 or more months prior to the survey or who report that they are menopausal. This proportion rises rapidly with age, particularly after age 42. The proportion menopausal is 10 percent before age 42 and reaches 48 percent in the oldest age group (age 48-49).

Long-term abstinence is an indicator of terminal abstinence—the percentage of currently married women who did not have sexual intercourse in the three years prior to the survey. Although long-term abstinence is an important factor in the termination of exposure in some countries, especially in sub-Saharan Africa, it is not significant in Indonesia, where only 4 percent of women in the oldest age group are terminally abstaining.

Table 8.8.2 Median duration of postpartum amenorrhea, abstinence, and insusceptibility: region and province

For births in the three years preceding the survey, the median number of months mothers are postpartum amenorrheic, postpartum abstaining, and postpartum insusceptible, by region and province, Indonesia 1997

Region and province	Median number of months mothers are:			Number of births
	Postpartum amenorrheic	Postpartum abstaining	Postpartum insusceptible	
<b>Java-Bali</b>	6.0	2.4	9.3	5,470
DKI Jakarta	2.9	2.4	3.8	351
West Java	5.2	2.2	5.6	2,010
Central Java	10.1	2.8	10.5	1,393
DI Yogyakarta	6.0	3.2	6.0	104
East Java	6.7	3.5	10.0	1,489
Bali	8.7	1.7	8.8	123
<b>Outer Java-Bali I</b>	5.6	2.3	6.1	2,897
Dista Aceh	5.7	2.9	5.9	214
North Sumatra	5.9	2.3	6.3	775
West Sumatra	4.4	2.7	4.7	233
South Sumatra	4.5	2.7	4.9	314
Lampung	8.5	3.2	8.7	317
West Nusa Tenggara	7.3	2.1	8.9	213
West Kalimantan	3.6	2.2	4.0	195
South Kalimantan	6.0	2.3	6.0	130
North Sulawesi	4.9	1.8	4.9	114
South Sulawesi	5.6	1.9	6.1	393
<b>Outer Java-Bali II</b>	5.2	2.4	6.0	1,317
Riau	4.9	2.1	5.2	205
Jambi	6.4	2.5	8.9	153
Bengkulu	4.8	2.3	4.9	69
East Nusa Tenggara	10.3	2.7	10.3	217
East Timor	10.1	2.4	10.1	70
Central Kalimantan	3.2	2.0	3.4	85
East Kalimantan	4.0	2.5	4.3	135
Central Sulawesi	4.0	2.3	4.2	107
Southeast Sulawesi	6.1	2.8	6.8	70
Maluku	4.2	3.1	4.8	105
Irian Jaya	2.8	2.3	5.4	102
<b>Total</b>	<b>5.7</b>	<b>2.4</b>	<b>7.4</b>	<b>9,685</b>

Note: Medians are based on current status.

Table 8.9 Termination of exposure to the risk of pregnancy

Indicators of menopause, and long-term abstinence among currently married women age 30-49, by age, Indonesia 1997

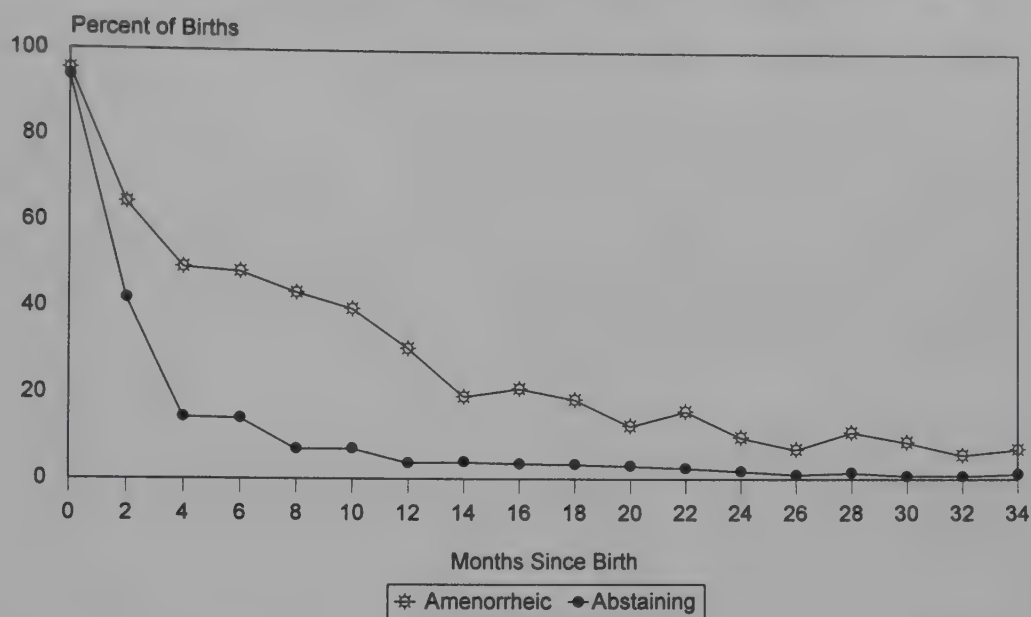
Age	Menopausal <sup>1</sup>		Long-term abstinence <sup>2</sup>	
	Percent	Number	Percent	Number
30-34	10.5	4,188	0.5	5,153
35-39	9.6	4,285	0.6	4,876
40-41	9.3	1,452	1.4	1,566
42-43	13.4	1,411	1.4	1,475
44-45	20.7	1,370	2.0	1,398
46-47	31.8	1,050	2.8	1,057
48-49	48.0	959	4.0	963
<b>Total</b>	<b>15.3</b>	<b>14,715</b>	<b>1.2</b>	<b>16,488</b>

<sup>1</sup>Percentage of non-pregnant, non-amenorrheic currently married women whose last menstrual period occurred six or more months preceding the survey or who report that they are menopausal.

<sup>2</sup>Percentage of currently married women who did not have intercourse in the three years preceding the survey.



**Figure 8.3**  
**Percentage of Births in the Last Three Years for Which Mothers are Amenorrheic or Abstaining**



IDHS97



## CHAPTER 9

### INFANT AND CHILD MORTALITY

#### 9.1 Background

For some time, Indonesia's health programs have focused on reducing the high levels of infant and childhood mortality. Various efforts have been carried out to achieve the goal of "a healthy population by the year 2000." To reach this goal, the government developed the National Health System, which is part of the national development plan. The infant mortality rate has been identified as one of the key indicators used to assess improvements in health development.

Infant and child mortality rates are relevant not only in evaluating the progress of health programs, but also in monitoring the current demographic situation and providing input for population projections. In addition, they can be used to identify subgroups of the population that have high mortality risks.

This chapter reports on levels, trends, and differentials in infant and child mortality based on the 1997 IDHS and selected earlier surveys. The following rates are used to measure early childhood mortality:

- Neonatal mortality:** the probability of dying within the first month of life;
- Postneonatal mortality:** the probability of dying after the first month of life but before exact age one year;
- Infant mortality:** the probability of dying between birth and exact age one year;
- Child mortality:** the probability of dying between exact age one and exact age five;
- Under-five mortality:** the probability of dying between birth and exact age five.

Data on infant and child mortality in the 1997 IDHS are derived from the birth history section of the individual questionnaire. The section begins with questions about the respondent's childbearing experience, i.e., the number of sons and daughters who live in the household, who live elsewhere, and who have died. Next, for each live birth, information on name, date of birth, sex, whether the birth was single or multiple, and survivorship status was recorded. For living children, information about his/her age at last birthday and whether the child resided with his/her mother was obtained. For children who had died, the respondent was asked to provide the age at death.

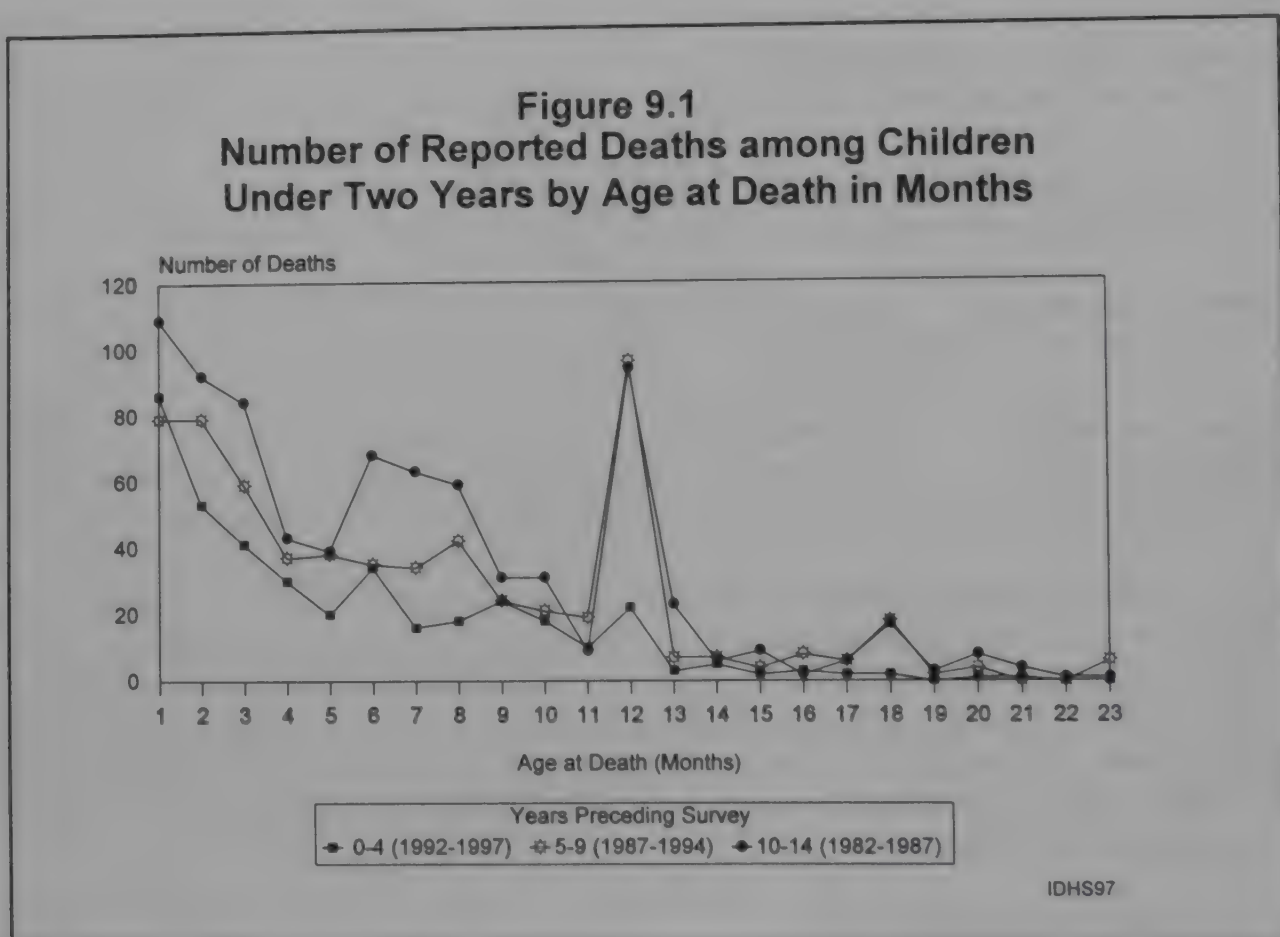
#### 9.2 Assessment of Data Quality

A retrospective birth history, such as that included in the 1997 IDHS, is susceptible to several possible data collection errors. First, only surviving women age 15-49 were interviewed; therefore, no data were available for children of women who had died. The resulting mortality estimates will be biased if the fertility of surviving and nonsurviving women differs substantially. In Indonesia, this bias is likely to be negligible. Another possible error is underreporting of events; respondents are likely to forget events that occurred in the past. Also, the misreporting of date of birth and/or age at death can bias rates. In general, these problems are less serious for time periods in the recent past than for those in the more distant past.

The existence and extent of some of these potential biases can be examined with the 1997 IDHS data. As shown in Table C.4 in Appendix C, there is a deficit of births in calendar year 1992 and an excess in calendar year 1991. This pattern, which has been found in previous DHS surveys, is thought to result from interviewers' transference of births out of the period for which the health and calendar data were collected (i.e., January 1992 through the date of the survey) in order to reduce their workload.



The most common source of error in the reporting of children's age at death is the tendency of mothers to report them as occurring at multiples of six months. To reduce this type of error, detailed instructions were given to the interviewers to record age at death under one month in *days*, and age at death under two years in *months*. Interviewers were also instructed to probe for exact age at death in months when it was reported as "one year" or "12 months." Nevertheless, as shown in Figure 9.1, there is considerable heaping of deaths at age 12 months. The same pattern was found in the 1994 IDHS. Heaping in age at death is more severe for deaths that occurred farther in the past than for those that occurred more recently. It should be noted that although misreporting of age at death may result in biased estimates of infant and child mortality, a simulation study using DHS data indicates that the magnitude of misreporting evident in the 1997 IDHS would bias estimates by no more than 5 percent (Sullivan et al., 1990). Thus, the results presented in this report are unadjusted for misreporting. In particular, all deaths reported as occurring at 12 months are not included in the calculation of the infant mortality rate.



It should also be noted that most infant and child mortality estimates using survey data are based on relatively small numbers of cases, particularly when fertility levels are low. This situation can lead to unstable estimates. To reduce this problem, mortality measures based on the 1997 IDHS are calculated for five- or ten-year periods.

Another problem concerns the fact that the mortality estimates are based only on those births reported by women of reproductive age at a given point in time and these are truncated because women past age 49 are not interviewed. As the time period covered extends further into the past, the resulting censoring of information becomes progressively more severe, and the higher rates of infant and child mortality are usually associated with more advanced maternal ages. To minimize the effect of censoring, analysis of infant and child mortality trends from the 1997 IDHS is limited to a period no more than 15 years prior to the survey.

### 9.3 Levels and Trends in Infant and Child Mortality

Table 9.1 presents estimates of childhood mortality for three five-year periods preceding the survey. The data indicate that infant mortality has declined 30 percent during the fifteen-year period, from 65 deaths per 1,000 live births in the period 1982-1987 to 46 per 1,000 in the period 1992-1997. During the same period, postneonatal mortality, child mortality, and under-five mortality declined at a faster rate (35 percent, 58 percent, and 39 percent, respectively), while the neonatal mortality rate declined by only 23 percent. The direct estimate of infant mortality for the most recent five-year period, 46 deaths per 1,000 births, is consistent with an estimate calculated using an indirect estimation technique referring to the year 1993 (51 deaths per 1,000 births)<sup>1</sup> (CBS, 1997b).

**Table 9.1 Infant and child mortality**

Neonatal, postneonatal, infant, child, and under-five mortality rates for three five-year periods preceding the survey and the ratio of postneonatal to neonatal mortality, Indonesia 1997

Years preceding survey	Approximate calendar periods	Neonatal mortality (NN)	Post-neonatal mortality (PNN)	Infant mortality (I <sub>90</sub> )	Child mortality (C <sub>91</sub> )	Under-five mortality (U <sub>90</sub> )	Post-neonatal/neonatal mortality ratio
0-4	1992-1997	21.8	23.9	45.7	13.1	58.2	1.10
5-9	1987-1992	28.2	30.3	58.5	25.6	82.6	1.07
10-14	1982-1987	28.4	37.0	65.4	31.3	94.7	1.30
0-9	1987-1997	25.0	27.2	52.2	19.4	70.6	1.09

Table 9.1 also gives infant mortality rates for the ten-year period preceding the survey. For infant mortality, the rate is 52 deaths per 1,000 live births; the neonatal mortality rate is 25 per 1,000, and the ratio of postneonatal to neonatal mortality is 1.09. For the same time period, the probability of dying between birth and the fifth birthday was 71 per 1,000 live births. The data indicate that the under-five mortality rates declined from 95 deaths per 1,000 live births in the period 10-14 years prior to the survey to 58 per 1,000 in the period 0-4 years preceding the survey. The ratio of postneonatal to neonatal mortality decreased from 1.3 to 1.1 during the fifteen-year period before the survey, because of the more rapid decline in postneonatal deaths in the most recent five-year period.

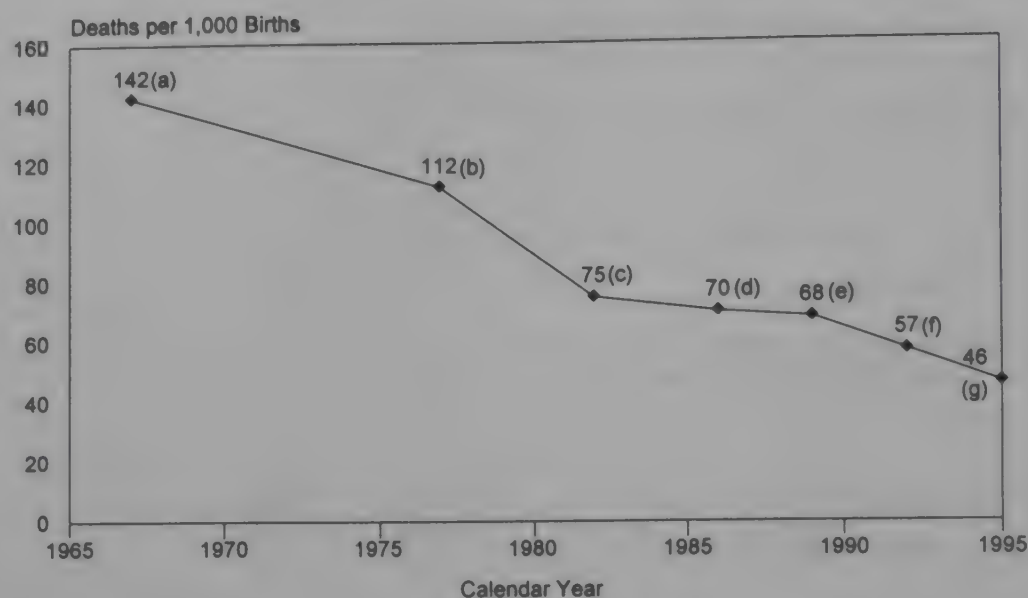
Trends in mortality can also be studied using estimates based on the 1971, 1980, and 1990 population censuses; the 1987 NICPS, and the 1991, 1994, and 1997 IDHS. Infant mortality based on the census data is estimated indirectly using information on the number of children ever born and the number of children who died; estimates from the NICPS and IDHS are obtained from the birth history data. Figure 9.2 shows that in 27 years, the infant mortality rate has declined by 68 percent, from 142 deaths per 1,000 births in 1968 to 46 per 1,000 births in 1995.

Table 9.2 shows the trends in mortality by region based on the results of the 1987 NICPS, the 1991 IDHS, the 1994 IDHS, and the 1997 IDHS. Between 1991 and 1994, infant and child mortality declined in all three regions and regional variations narrowed; however, the 1997 IDHS results show that even though infant and child mortality have declined in all regions (except child mortality in DI Yogyakarta), the regional variations have become wider.

<sup>1</sup>The projected infant mortality rate for 1993 was calculated based on the 1990 population census.



**Figure 9.2**  
**Infant Mortality Rates, Selected Sources,**  
**Indonesia, 1971-1997**



Source: (a) 1971 Census, (b) 1980 Census, (c) 1987 NICPS, (d) 1990 Census, (e) 1991 IDHS, (f) 1994 IDHS, and (g) 1997 IDHS

**Table 9.2 Trends in infant and child mortality by region**

Infant and child mortality for the ten-year period preceding the surveys by region, 1987 NICPS, 1991 IDHS, 1994 IDHS, and IDHS 1997

Region and province	Infant mortality rate				Child mortality rate				Under-five mortality rate			
	1987 NICPS	1991 IDHS	1994 IDHS	1997 IDHS	1987 NICPS	1991 IDHS	1994 IDHS	1997 IDHS	1987 NICPS	1991 IDHS	1994 IDHS	1997 IDHS
<b>Java-Bali</b>	70.3	78.8	66.5	46.8	36.9	34.3	25.3	16.4	104.5	110.3	90.1	62.4
DKI Jakarta	52.9	44.9	29.8	26.1	26.9	15.7	21.1	16.0	78.4	59.9	50.3	41.7
West Java	94.7	116.9	88.8	60.6	51.3	53.3	33.8	17.7	141.1	164.0	119.6	77.2
Central Java	47.8	48.8	51.1	45.2	35.4	32.6	25.0	15.4	81.6	79.8	74.8	59.9
DI Yogyakarta	37.6	37.5	30.4	23.4	19.1	11.8	4.9	7.0	56.0	48.9	35.1	30.3
East Java	71.4	69.3	62.1	35.8	27.6	20.6	17.8	17.4	97.0	88.5	78.8	52.5
Bali	65.6	49.1	58.0	39.5	16.3	12.2	5.2	4.7	80.8	60.7	62.9	44.0
<b>Outer Java-Bali I</b>	83.7	69.2	66.8	58.3	42.0	37.3	32.4	22.8	122.2	104.0	97.0	79.8
<b>Outer Java-Bali II</b>	75.5	65.9	65.3	60.7	47.1	36.0	31.8	23.9	119.1	99.6	95.0	83.1
<b>Total</b>	75.2	74.2	66.4	52.2	39.1	35.4	28.3	19.4	114.1	107.0	92.8	70.6

Note: Approximate calendar periods covered: 1987 NICPS (1977-1987), 1991 IDHS (1981-1991), 1994 IDHS (1984-1994) and 1997 IDHS (1987-1997).

Despite the fact that mortality rates in West Java have declined in recent years, this province continues to have the highest mortality in Java (see Table 9.2). At the same time, DI Yogyakarta generally has the lowest mortality in the Java-Bali region.



Children in Java-Bali have lower levels of infant and child mortality than children in Outer Java-Bali. This may be due to better health and medical facilities in the Java-Bali region than in the Outer Java-Bali regions.

## 9.4 Mortality Differentials

A number of socioeconomic, environmental, and biological factors influence infant and child mortality. Mosley and Chen's (1984) framework for the study of child mortality in developing countries outlines various proximate and socioeconomic determinants of infant mortality. In the following section, infant and child mortality differentials are discussed according to biodemographic and socioeconomic variables that were included in the 1997 IDHS. Several variables, namely age of the mother, parity, and birth interval, were used as the biodemographic determinants. The socioeconomic determinants, which operate through the biodemographic determinants to influence infant mortality, include place of residence and mother's educational attainment. Additionally, several variables related to health, such as the type of birth attendant and birth weight, as well as variation among provinces, are discussed.

Table 9.3 presents mortality rates by socioeconomic characteristics of the mother for the ten-year period preceding the survey, i.e., from 1987 to 1997. Children born to women living in urban areas have lower mortality rates than those born to women in rural areas. The same pattern was found in the 1987 NICPS, 1991 IDHS, and 1994 IDHS, for all ages at death and in all regions. The lower mortality rates in the urban areas may be related to the greater availability of health facilities.

Mother's level of education is closely associated with socioeconomic factors such as income, life style, health practices, nutrition, and housing and living conditions. Women who have limited education usually have low income and live in less sanitary housing conditions; thus, their children usually have a higher risk of morbidity and mortality. The 1997 IDHS data show that mother's educational attainment is inversely associated with childhood mortality levels; children of less-educated mothers generally have higher mortality than those born to better educated mothers.

Table 9.3 also shows the relationship of infant and child mortality to antenatal care and delivery assistance. Mortality among children whose mothers had neither antenatal care nor medical assistance at the time of delivery is noticeably highest, followed by that for children with either antenatal care or delivery assistance by a medical professional (except for neonatal mortality). As expected, childhood mortality is lowest for children of mothers who received antenatal care and were assisted by a medical professional at delivery. The same pattern was found in the 1991 IDHS and 1994 IDHS.

The relationship between infant and child mortality rates for the ten-year period prior to the survey (1987 to 1997) and various biodemographic variables can be observed in Table 9.4. These variables have been found to be associated with the level of infant and child deaths. Overall, except for childhood mortality, the rates for males are higher than those for females. For example, infant mortality rates for males are about 30 percent higher than those for females, while under-five mortality and neonatal mortality for males are about 20 percent higher than those for females. Sex differentials in childhood mortality were also observed since the 1987 NICPS.

Mother's age at birth can affect a child's chances of survival. The 1987 NICPS, 1991 IDHS, and 1994 IDHS results indicate that childhood mortality rates follow a U-shaped pattern according to mother's age. However, results of the 1997 IDHS show a different pattern. In general, rates are highest for children whose mothers are younger than 20 years at the time of delivery, and lowest among children whose mothers are 40-49 years. The rates of infant and child mortality to mothers age 30-39 years at the time of delivery are second highest.

**Table 9.3 Infant and child mortality by background characteristics**

Infant and child mortality rates for the ten-year period preceding the survey, by selected background characteristics, Indonesia 1997

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)	Infant mortality ( $_1q_0$ )	Child mortality ( $_4q_1$ )	Under-five mortality ( $_5q_0$ )
<b>Residence</b>					
Urban	19.2	16.6	35.7	12.3	47.6
Rural	27.1	30.9	58.0	21.8	78.5
<b>Region/Residence</b>					
Java-Bali	22.9	23.9	46.8	16.4	62.4
Urban	17.9	16.8	34.7	12.0	46.2
Rural	25.1	27.0	52.2	18.3	69.5
Outer Java-Bali I	26.8	31.6	58.3	22.8	79.8
Urban	21.7	15.9	37.6	13.9	51.0
Rural	28.0	35.5	63.5	25.0	86.9
Outer Java-Bali II	29.9	30.7	60.7	23.9	83.1
Urban	21.7	16.6	38.3	11.2	49.0
Rural	31.9	34.0	65.8	26.9	90.9
<b>Education</b>					
No education	39.9	37.7	77.5	33.4	108.3
Some primary	25.2	38.0	63.4	24.2	86.0
Completed primary	27.2	27.3	54.5	18.4	71.8
Some secondary +	16.6	11.5	28.0	7.4	35.2
<b>Medical/maternity care<sup>1</sup></b>					
No antenatal or delivery care	40.6	55.7	96.3	24.8	118.7
Either antenatal or delivery care	18.3	31.5	49.7	12.1	61.2
Both antenatal and delivery care	21.1	11.2	32.4	7.8	39.9
<b>Total</b>	<b>25.0</b>	<b>27.2</b>	<b>52.2</b>	<b>19.4</b>	<b>70.6</b>

Note: The approximate calendar period covered is mid-1987 to mid-1997.

<sup>1</sup> Rates are for the five-year period preceding the survey.

Table 9.4 also shows that birth order affects a child's chances of survival. It is often hypothesized that first births and higher order births have higher mortality risks. However, the data indicate that mortality rates for first births are lower than those for second and third births. Except for neonatal mortality, the rates of mortality increase along with the increasing of the birth order; the higher the birth order, the higher the rates of mortality. For example, under-five mortality is 59 per 1,000 live births for first births; 66 and 76 per 1,000 live births for birth orders 2-3 and 4-6, respectively; and 124 per 1,000 live births for seventh and higher birth orders.

As expected, there is an inverse relationship between mortality rates and the interval since the previous birth; childhood mortality rates decline as the birth interval increases. The under-five mortality rates for children born less than two years after a previous birth are almost three times higher than those for children born after an interval of four or more years (135 compared with 48 deaths per 1,000 live births).



Table 9.4 Infant and child mortality by biodemographic characteristics

Infant and child mortality rates for the ten-year period preceding the survey, by selected biodemographic characteristics, Indonesia 1997

Biodemographic characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)	Infant mortality ( $_1q_0$ )	Child mortality ( $_4q_1$ )	Under-five mortality ( $_5q_0$ )
<b>Sex of child</b>					
Male	27.2	31.8	59.1	19.2	77.1
Female	22.7	22.2	44.9	19.5	63.6
<b>Age of mother at birth<sup>1</sup></b>					
< 20	32.0	31.5	63.4	21.9	84.0
20-29	22.6	24.8	47.4	17.3	63.8
30-39	26.8	30.4	57.2	23.7	79.5
40-49	20.7	20.6	41.3	5.5	46.5
<b>Birth order</b>					
1	26.2	21.5	47.7	11.8	58.9
2-3	23.0	26.0	49.1	18.2	66.4
4-6	20.8	28.9	49.7	28.1	76.3
7+	44.8	52.7	97.5	29.1	123.8
<b>Previous birth interval</b>					
< 2 yrs	46.8	56.6	103.4	35.3	135.0
2-3 yrs	22.4	29.4	51.8	21.3	72.0
4 yrs +	15.2	16.6	31.8	16.7	48.0
<b>Size at birth<sup>1</sup></b>					
Very small	193.8	55.9	249.7	9.2	256.6
Small	39.8	30.6	70.4	13.8	83.2
Average or larger	15.9	22.5	38.4	11.2	49.2

Note: The approximate calendar period covered is mid-1987 to mid-1997. Figures in parentheses are based on 250-499 births.

<sup>1</sup> Rates are for the five-year period preceding the survey.

Except for childhood mortality, the probability of dying for infants who were considered to be *very small* at birth by their mothers is much higher than that for infants described as *small* or *average or larger* at birth (see Table 9.4). The period immediately after birth is critical, especially for babies reported to be very small. However, it should be noted that the information on infant size at birth presented here is subjective (because it is based on the judgment of mothers) and is not comparable with actual birth weight. The neonatal mortality rates for infants who were judged to be *very small* at birth by their mothers are twelve times higher than those for infants who were reported to be in *average or larger* at birth (194 compared with 16 deaths per 1,000 live births). This ratio for infant mortality and under-five mortality is only seven and five times, respectively.

In a country as large and geographically dispersed as Indonesia, considerable variation in mortality among regions and provinces is not surprising. Table 9.5 shows patterns of provincial mortality in the 1997 IDHS. The lowest infant mortality rates in the country are found in DI Yogyakarta, DKI Jakarta, and Maluku (under 30 deaths per 1,000 live births), and the highest are in West Nusa Tenggara (111 per 1,000). West Kalimantan, South Kalimantan, Bengkulu, Central Sulawesi, and Southeast Sulawesi have relatively high levels of infant mortality—70 deaths or more per 1,000 live births.



**Table 9.5 Infant and child mortality by region and province**

Infant and child mortality rates for the ten-year period preceding the survey, by region and province, Indonesia 1997

Region and province	Neonatal mortality (NN)	Postneonatal mortality (PNN)	Infant mortality ( $_1q_0$ )	Child mortality ( $_4q_1$ )	Under-five mortality ( $_5q_0$ )
<b>Java-Bali</b>	22.9	23.9	46.8	16.4	62.4
DKI Jakarta	16.3	9.8	26.1	16.0	41.7
West Java	29.7	30.9	60.6	17.7	77.2
Central Java	23.4	21.8	45.2	15.7	59.9
DI Yogyakarta	(10.6)	12.7	23.4	7.0	30.3
East Java	14.6	21.2	35.8	17.4	52.5
Bali	27.5	12.0	39.5	4.7	44.0
<b>Outer Java-Bali I</b>	26.8	31.6	58.3	22.8	79.8
Dista Aceh	23.5	22.0	45.5	13.7	58.6
North Sumatra	24.3	21.0	45.2	27.9	71.9
West Sumatra	30.8	35.0	65.8	31.3	95.1
South Sumatra	23.1	29.9	53.0	18.4	70.4
Lampung	27.6	20.6	48.2	16.7	64.0
West Nusa Tenggara	46.7	63.8	110.5	43.9	149.5
West Kalimantan	28.4	41.9	70.3	19.2	88.2
South Kalimantan	(27.0)	43.8	70.7	17.8	87.3
North Sulawesi	(20.0)	27.6	47.6	14.1	61.0
South Sulawesi	23.2	39.8	63.0	17.1	79.0
<b>Outer Java-Bali II</b>	29.9	30.7	60.7	23.9	83.1
Riau	32.9	27.5	60.4	23.4	82.4
Jambi	36.8	31.4	68.3	15.2	82.4
Bengkulu	(34.1)	38.2	72.3	46.2	115.2
East Nusa Tenggara	29.3	30.4	59.7	32.3	90.1
East Timor	*	18.5	32.8	17.0	49.2
Central Kalimantan	(29.4)	25.9	55.3	14.4	68.9
East Kalimantan	(29.3)	21.4	50.7	16.4	66.2
Central Sulawesi	(43.7)	50.8	94.5	29.7	121.4
Southeast Sulawesi	*	51.8	78.1	17.4	94.2
Maluku	(11.1)	18.4	29.5	19.5	48.4
Irian Jaya	(32.2)	32.5	64.7	29.5	92.3
<b>Total</b>	<b>25.0</b>	<b>27.2</b>	<b>52.2</b>	<b>19.4</b>	<b>70.6</b>

Note: The approximate calendar period covered is mid-1987 to mid-1997. Figures in parentheses are based on 250-499 births. An asterisk indicates that a figure is based on fewer than 250 births and has been suppressed.

In Java-Bali, West Java is the only province that has infant and child mortality rates higher than those for Indonesia as a whole. The variation in infant and child mortality among the provinces in the Outer Java-Bali regions is greater than among the provinces in Java-Bali.

## 9.5 High-Risk Fertility Behavior

Table 9.6 presents the distribution of women and children according to fertility behavior characteristics that place children at an elevated risk of dying. Children at elevated risk include those whose mothers are too young or too old when they give birth, those of high birth order, and those born after short birth intervals. Assumptions about these risks are that the physiological condition of young women (18 years or younger) is not sufficiently mature for healthy reproduction, which leads to greater risk of neonatal death. On the other hand, women age 35 years or older may be physically debilitated as a result of having many children, which may adversely affect the baby's health. Short birth intervals can affect the health of both

children, which may adversely affect the baby's health. Short birth intervals can affect the health of both mother and child and reduce the baby's chances of survival. Table 9.6 also shows the relative risk of dying for children born in the five years preceding the survey by comparing the proportion dead in each high-risk category to the proportion dead among children who are not in any high-risk category.

**Table 9.6 High-risk fertility behavior**

Percent distribution of children born in the five years preceding the survey by category of elevated risk of mortality, and the percent distribution of currently married women at risk of conceiving a child with an elevated risk of mortality, by category of increased risk, Indonesia 1997

Risk category	Births in 5 years preceding the survey		Percentage of currently married women <sup>a</sup>
	Percentage of births	Risk ratio	
<b>Not in any high-risk category</b>	59.9	1.00	35.2 <sup>b</sup>
<b>Single high-risk category</b>			
Mother's age < 18	4.8	2.20	0.7
Mother's age > 34	2.4	1.32	10.9
Birth interval < 24 months	6.0	1.94	8.5
Birth order > 3	13.8	1.29	9.2
Subtotal	27.1	1.60	29.3
<b>Multiple high-risk category</b>			
Age < 18 & birth interval < 24 months <sup>c</sup>	0.2	9.09	0.2
Age > 34 & birth interval < 24 months	0.1	0.60	0.2
Age > 34 & birth order > 3	8.7	1.32	29.0
Age > 34 & birth interval < 24 & birth order > 3	1.2	4.06	2.4
Birth interval < 24 & birth order > 3	2.8	2.84	3.7
Subtotal	13.0	2.03	35.5
<b>In any high-risk category</b>	40.1	1.74	64.8
<b>Total</b>	100.0	-	100.0
<b>Number of births</b>	16,080	-	26,886

Note: Risk ratio is the ratio of the proportion dead of births in a specific high-risk category to the proportion dead of births *not in any high-risk category*.

<sup>a</sup> Women were assigned to risk categories according to the status they would have at the birth of a child, if the child were conceived at the time of the survey: age less than 17 years and 3 months, age older than 34 years and 2 months, latest birth less than 15 months ago, and latest birth of order 4 or higher.

<sup>b</sup> Includes sterilized women

<sup>c</sup> Includes the combined categories Age < 18 and birth order > 3.

Table 9.6 shows that 40 percent of children born in the five years preceding the survey have an elevated risk of dying; 27 percent are in a single high-risk category, while 13 percent are in a multiple high-risk category. Among children in single high-risk categories, 14 percent are fourth births or higher, 6 percent are children born less than two years after a prior birth, and 5 percent are children born to mothers younger than 18 years. Among children in multiple high-risk categories, 9 percent were born to mothers 35 or older and were birth order 4 or higher.

The second column in Table 9.6 presents risk ratios for children in various risk categories. Children in the single high-risk categories have a 1.6 greater risk of dying prematurely than children who are not in

any high-risk category, and children in multiple high-risk categories have twice the risk of dying as those who are not in any high-risk category. The highest mortality risks are found in the combination of early childbearing and short birth interval (9.0), while the lowest mortality risk is found among births with short birth interval and late childbearing (0.6).

The last column of Table 9.6 presents the distribution of currently married women according to category of increased risk if they were to conceive at the time of the survey. The table indicates that about two in three currently married women are at risk of conceiving a child with an elevated risk of dying; 29 percent of women are at risk because of a single factor, while 36 percent of women have multiple risk factors. The most likely risks are high birth order combined with late childbearing (29 percent of currently married women), giving birth at age 35 years or older (11 percent), high birth order (9 percent), and short birth intervals (9 percent).



## CHAPTER 10

### MATERNAL HEALTH

This chapter presents findings on maternal health--antenatal care and delivery assistance. In line with the program to improve maternal health and to make maternal health care services more accessible, besides health centers in every subdistrict, ambulatory health services, auxiliary health centers (*puskesmas pembantu*), health posts (*posyandu*), and village delivery posts (*polindes*) have been established. In village delivery posts, antenatal care and delivery assistance are provided by trained traditional birth attendants under the supervision of a midwife.

#### 10.1 Antenatal Care

Table 10.1.1 shows the percent distribution of live births in the five-year period prior to the survey by type of antenatal care received during pregnancy according to selected background characteristics. In Indonesia, antenatal care is defined as pregnancy-related health care provided by medical professionals (doctor, nurse, or midwife), excluding traditional birth attendants and friends. Although each live birth may have received antenatal care from multiple types of providers, in this report the evaluation of maternal health care for early detection of high-risk pregnancies is based on the most qualified provider. The place of antenatal care service, recorded in the survey, is the most frequently visited service.

Among 28,810 ever-married women age 15-49 interviewed in the survey, 13,170 were mothers who had a total of 16,217 live births in the five years preceding the survey. Eighty-nine percent of these births were to mothers who received antenatal care from a medical professional—79 percent were cared for by a nurse/midwife or an auxiliary nurse/midwife.

Antenatal coverage is slightly lower among births to mothers age 35 and older. Third or lower order births are more likely to receive antenatal care from medical professionals than higher order births. Births to mothers living in urban areas or in Java-Bali are more likely to receive antenatal care from medical professionals than other births. Ninety-two percent of live births in Java-Bali had antenatal care from medical professionals, compared with 88 percent in Outer Java-Bali I and 83 percent in Outer Java-Bali II.

There is a strong relationship between mother's education and antenatal care. Seventy-one percent of births to mothers with no education received antenatal care from medical professionals, compared with only 97 percent of children whose mothers had some secondary education. The corresponding proportions for children whose mothers had some primary education and who have completed primary school are 83 percent and 91 percent, respectively.

Mothers living in the urban areas and those having some secondary education are more likely to receive antenatal care from a doctor than other mothers. Although there is little variation in antenatal care coverage by medical professionals between regions, there are sharp differentials between urban and rural areas within regions.

Table 10.1.2 shows the provincial differentials in antenatal care coverage. Virtually all women in DKI Jakarta and DI Yogyakarta had antenatal care during pregnancy. Antenatal care coverage was 90 percent or higher in East Java, Bali, West Sumatra, South Sumatra, Lampung, West Nusa Tenggara, North Sulawesi, and East Kalimantan. On the other hand, antenatal coverage was less than 70 percent in Jambi and Maluku, where a large proportion of women received antenatal care from traditional birth attendants. It is interesting to note, however, that 28 percent of births in the five years preceding the survey in East Timor did not receive any antenatal care.

**Table 10.1.1 Antenatal care: background characteristics**

Percent distribution of live births in the five years preceding the survey by source of antenatal care during pregnancy, according to selected background characteristics, Indonesia 1997

Background characteristic	Source of antenatal care <sup>1</sup>						Total	Number of births
	Doctor	Nurse/ Midwife	Auxiliary nurse/ Midwife	Tradi- tional birth attendant	Other	No one		
<b>Mother's age at birth</b>								
< 20	5.4	77.0	6.4	3.8	0.0	7.4	100.0	2,215
20-24	10.1	72.9	8.6	2.6	0.1	5.8	100.0	4,647
25-29	13.7	70.7	6.6	2.9	0.0	6.0	100.0	4,236
30-34	10.7	69.9	7.3	3.3	0.1	8.7	100.0	3,111
35+	10.6	65.3	7.5	4.8	0.1	11.7	100.0	2,007
<b>Birth order</b>								
1	13.8	73.5	6.7	2.1	0.0	3.8	100.0	5,314
2-3	10.9	72.2	7.4	2.8	0.1	6.6	100.0	6,581
4-6	6.7	70.4	8.2	4.2	0.0	10.5	100.0	3,314
7+	4.2	58.2	8.6	8.4	0.1	20.6	100.0	1,008
<b>Residence</b>								
Urban	22.4	69.9	4.9	1.1	0.0	1.7	100.0	4,373
Rural	6.2	71.9	8.3	4.0	0.1	9.4	100.0	11,844
<b>Region/Residence</b>								
Java-Bali	11.1	75.8	4.9	2.3	0.0	6.0	100.0	9,188
Urban	21.4	71.4	4.4	1.1	0.0	1.7	100.0	2,940
Rural	6.3	77.8	5.1	2.9	0.0	7.9	100.0	6,247
Outer Java-Bali I	9.3	68.4	10.2	3.7	0.0	8.3	100.0	4,821
Urban	24.1	68.3	5.4	0.8	0.0	1.4	100.0	984
Rural	5.5	68.5	11.4	4.5	0.0	10.1	100.0	3,837
Outer Java-Bali II	11.3	59.6	11.8	5.9	0.3	11.1	100.0	2,207
Urban <sup>1</sup>	25.7	63.9	6.9	1.4	0.0	2.1	100.0	448
Rural	7.6	58.5	13.0	7.1	0.4	13.4	100.0	1,759
<b>Mother's education</b>								
No education	3.4	60.2	7.8	5.7	0.1	22.7	100.0	1,462
Some primary	3.4	72.0	7.5	4.9	0.1	12.1	100.0	4,067
Completed primary	5.8	76.1	9.1	3.5	0.0	5.5	100.0	5,262
Some secondary+	22.6	69.3	5.5	1.0	0.0	1.5	100.0	5,425
<b>Total</b>	<b>10.6</b>	<b>71.4</b>	<b>7.4</b>	<b>3.2</b>	<b>0.1</b>	<b>7.4</b>	<b>100.0</b>	<b>16,217</b>

<sup>1</sup> If the respondent mentioned more than one provider, only the *most* qualified was considered.

## 10.2 Place of Antenatal Care, Number of Antenatal Care Visits, and Stage of Pregnancy

Table 10.2.1 indicates that 52 percent of children were born to mothers who received antenatal care from government health services, of which health centers are the most often visited (39 percent).

Rural women are more likely to visit a public health facility for antenatal care, while urban women go to a private facility. The facility most often used by rural women is the health center, while urban women

use the services of a private midwife. Private services are more frequently utilized by better educated women than those with less education; the comparison is 54 percent for women with secondary or higher education and 19 percent for women with no education. Since village delivery posts (polindes) are available only in limited areas, they have limited utilization (2 percent)—less than 1 percent in the urban areas and 3 percent in the rural areas.

Table 10.1.2 Antenatal care: region and province

Percent distribution of live births in the five years preceding the survey by source of antenatal care during pregnancy, according to region and province, Indonesia 1997

Region and province	Source of antenatal care <sup>1</sup>						Total	Number of births
	Doctor	Nurse/ Midwife	Auxiliary nurse/ Midwife	Tradi- tional birth attendant	Other	No one		
<b>Java-Bali</b>	11.1	75.8	4.9	2.3	0.0	6.0	100.0	9,188
DKI Jakarta	27.5	66.0	5.9	0.3	0.0	0.4	100.0	572
West Java	7.1	73.4	5.6	5.1	0.0	8.7	100.0	3,351
Central Java	12.9	75.7	5.2	1.1	0.0	5.1	100.0	2,385
DI Yogyakarta	19.1	71.4	7.8	0.0	0.0	1.7	100.0	181
East Java	10.2	81.3	2.9	0.6	0.0	5.0	100.0	2,497
Bali	12.7	76.8	8.0	0.2	0.0	2.3	100.0	202
<b>Outer Java-Bali I</b>	9.3	68.4	10.2	3.7	0.0	8.3	100.0	4,821
Dista Aceh	6.3	61.8	17.1	1.5	0.0	13.4	100.0	354
North Sumatra	9.1	64.9	8.0	7.3	0.0	10.6	100.0	1,267
West Sumatra	14.4	71.5	7.8	3.0	0.0	3.3	100.0	385
South Sumatra	13.8	68.5	10.2	3.3	0.0	4.3	100.0	516
Lampung	4.5	78.1	11.6	2.2	0.0	3.6	100.0	544
West Nusa Tenggara	5.9	67.2	17.6	1.8	0.0	7.4	100.0	371
West Kalimantan	4.5	66.7	10.1	1.2	0.0	17.5	100.0	324
South Kalimantan	6.6	62.6	19.4	7.1	0.0	4.1	100.0	214
North Sulawesi	24.2	56.3	15.1	0.2	0.0	4.1	100.0	192
South Sulawesi	10.1	75.6	2.4	2.4	0.0	9.6	100.0	655
<b>Outer Java-Bali II</b>	11.3	59.6	11.8	5.9	0.3	11.1	100.0	2,207
Riau	16.7	59.8	9.5	7.0	0.2	6.8	100.0	344
Jambi	6.9	46.4	16.0	14.2	0.0	16.5	100.0	247
Bengkulu	10.2	69.7	6.8	5.1	0.0	8.2	100.0	117
East Nusa Tenggara	5.1	67.6	12.7	3.5	1.5	9.5	100.0	367
East Timor	12.3	49.7	8.9	1.4	0.0	27.7	100.0	116
Central Kalimantan	5.3	52.8	24.6	6.3	0.0	10.9	100.0	153
East Kalimantan	23.5	66.5	6.0	0.7	0.0	3.4	100.0	223
Central Sulawesi	10.8	59.0	12.7	5.6	0.3	11.6	100.0	177
Southeast Sulawesi	10.9	69.6	8.7	6.8	0.0	4.0	100.0	117
Maluku	10.0	53.5	3.9	11.1	0.0	21.6	100.0	173
Irian Jaya	11.3	58.1	17.8	1.4	0.0	11.4	100.0	173
<b>Total</b>	10.6	71.4	7.4	3.2	0.1	7.4	100.0	16,217

<sup>1</sup> If the respondent mentioned more than one provider, only the *most* qualified was considered.



**Table 10.2.1 Place of antenatal care: background characteristics**

Percent distribution of live births in the five years preceding the survey by place of antenatal care during pregnancy, according to selected background characteristics, Indonesia 1997

Background characteristics, Indonesia 1997													
Background characteristic	Place of antenatal care											Total	Number of births
	Government				Private								
	Hos-pital	Health center	Deliv-ery post	Health post	Hos-pital	Family planning clinic	Doctor	Mid-wife	TBA visit	Other	No one		
<b>Mother's age at birth</b>													
< 20	2.7	44.7	1.4	8.2	1.2	2.0	1.9	27.1	2.0	1.3	7.4	100.0	2,215
20-24	4.7	39.9	1.7	6.5	2.5	3.7	3.6	28.6	2.3	0.6	5.8	100.0	4,647
25-29	5.0	37.1	2.8	6.0	4.3	3.3	4.8	28.0	2.6	0.3	6.0	100.0	4,236
30-34	4.0	38.0	2.1	5.8	3.3	3.9	4.1	26.4	3.2	0.5	8.7	100.0	3,111
35+	3.6	38.8	1.9	5.5	2.8	2.7	4.4	23.9	4.2	0.5	11.7	100.0	2,007
<b>Birth order</b>													
1	4.4	39.0	1.4	6.1	3.6	4.0	5.1	30.4	1.8	0.4	3.8	100.0	5,314
2-3	4.5	39.7	2.5	6.4	3.5	3.5	4.1	26.3	2.2	0.7	6.6	100.0	6,581
4-6	3.7	40.5	2.2	6.8	1.8	2.1	2.2	25.7	3.8	0.8	10.5	100.0	3,314
7+	3.0	35.0	1.8	5.6	1.2	1.9	1.5	21.5	8.1	0.2	20.5	100.0	1,008
<b>Residence</b>													
Urban	6.1	27.2	0.1	2.1	8.9	6.7	9.0	36.9	0.5	0.7	1.7	100.0	4,373
Rural	3.5	43.7	2.7	7.9	0.9	2.0	2.0	23.7	3.6	0.5	9.4	100.0	11,844
<b>Region/Residence</b>													
Java-bali	3.1	38.8	2.1	5.4	3.3	2.9	4.5	31.6	1.9	0.4	6.0	100.0	9,188
Urban	4.6	26.1	0.1	1.5	8.7	5.4	8.6	41.7	0.5	1.0	1.7	100.0	2,940
Rural	2.4	44.6	3.1	7.2	0.9	1.7	2.6	26.8	2.6	0.1	7.9	100.0	6,247
Outer Java-Bali I	5.3	37.6	2.2	6.3	2.6	4.5	2.9	26.2	3.5	0.6	8.3	100.0	4,821
Urban	8.2	26.8	0.1	2.4	10.4	10.4	9.3	30.3	0.6	0.1	1.4	100.0	984
Rural	4.5	40.4	2.7	7.2	0.6	3.0	1.3	25.1	4.2	0.8	10.1	100.0	3,837
Outer Java-Bali II	6.5	45.4	1.3	10.3	2.5	2.2	3.4	11.4	4.5	1.2	11.1	100.0	2,207
Urban	11.2	35.4	0.1	5.5	6.7	6.9	11.2	20.0	0.9	0.0	2.1	100.0	448
Rural	5.3	48.0	1.7	11.5	1.4	1.0	1.4	9.2	5.4	1.6	13.4	100.0	1,759
<b>Level of education</b>													
No education	1.3	37.4	3.5	10.1	0.4	1.1	2.0	15.6	5.1	0.8	22.7	100.0	1,462
Some primary	2.7	43.9	2.6	8.1	1.0	1.5	1.0	22.3	3.9	0.8	12.1	100.0	4,067
Completed primary	3.3	43.8	2.1	6.8	1.3	2.3	1.5	29.6	3.2	0.6	5.5	100.0	5,262
Some secondary +	7.0	32.0	1.2	3.5	6.9	6.2	8.8	31.8	0.8	0.3	1.5	100.0	5,425
<b>Total</b>	4.2	39.3	2.0	6.3	3.0	3.3	3.9	27.2	2.7	0.6	7.4	100.0	16,217

TBA = Traditional birth attendant

Table 10.2.2 shows provincial variations in the utilization of health services for antenatal care. In DKI Jakarta, Bali, North Sumatra, West Sumatra, and Lampung, more than 50 percent of children were born to mothers who had antenatal care from private health facilities, among which private midwife's clinics were the most frequently visited.

The Indonesian maternal health program recommends that pregnant women have at least four antenatal care visits during pregnancy, according to the following schedule: one visit in the first trimester, one visit in the second trimester, and two visits in the third trimester. Table 10.3 shows that the median number of antenatal visits was 6.6, well above the recommended number. Sixty-nine percent of births were to mothers who had four or more antenatal care visits from a medical professional (Figure 10.1).

Table 10.2.2 Place of antenatal care: region and province

Percent distribution of live births in the five years preceding the survey by place of antenatal care during pregnancy, according to region and province, Indonesia 1997

Region and province	Place of antenatal care											Total	Number of births
	Government				Private								
	Hos- pital	Health center	Deliv- ery post	Health post	Family			Mid- wife	TBA visit	Other	No one		
					Hos- pital	planning clinic	Doctor						
Java-Bali	3.1	38.8	2.1	5.4	3.3	2.9	4.5	31.6	1.9	0.4	6.0	100.0	9,188
DKI Jakarta	5.2	21.4	0.0	0.2	12.2	8.2	8.5	43.7	0.3	0.0	0.4	100.0	572
West Java	2.4	35.1	1.4	5.6	2.7	1.1	3.0	34.4	4.4	1.0	8.7	100.0	3,351
Central Java	5.7	41.8	1.0	5.5	1.0	4.1	5.8	29.7	0.4	0.0	5.1	100.0	2,385
DI Yogyakarta	4.0	49.3	0.2	0.2	2.4	5.1	6.4	30.7	0.0	0.0	1.7	100.0	181
East Java	1.2	44.1	5.0	6.8	4.7	2.8	3.8	25.7	0.7	0.1	5.0	100.0	2,497
Bali	2.9	36.2	0.0	2.0	0.5	1.7	9.4	45.0	0.2	0.0	2.3	100.0	202
Outer Java-Bali I	5.3	37.6	2.2	6.3	2.6	4.5	2.9	26.2	3.5	0.6	8.3	100.0	4,821
Dista Aceh	5.7	48.2	1.8	6.2	0.8	6.4	2.7	13.5	1.1	0.3	13.4	100.0	354
North Sumatra	4.8	18.1	3.6	2.9	1.4	8.7	2.5	39.4	6.7	1.2	10.6	100.0	1,267
West Sumatra	5.2	28.1	1.9	5.3	3.9	3.0	5.3	40.0	3.5	0.5	3.3	100.0	385
South Sumatra	4.1	39.5	2.2	5.0	2.1	4.6	4.7	29.5	3.7	0.4	4.3	100.0	516
Lampung	0.7	34.4	0.0	8.0	1.0	4.7	2.5	42.5	2.0	0.7	3.6	100.0	544
West Nusa Tenggara	2.5	57.2	4.0	18.8	1.5	0.5	1.5	4.1	2.4	0.2	7.4	100.0	371
West Kalimantan	2.7	48.5	4.9	10.4	2.0	3.5	1.4	7.4	1.0	0.5	17.5	100.0	324
South Kalimantan	2.6	57.4	0.2	7.5	0.2	1.2	4.4	17.9	3.6	0.7	4.3	100.0	214
North Sulawesi	12.0	54.5	1.2	8.5	4.8	3.2	4.6	6.7	0.2	0.1	4.1	100.0	192
South Sulawesi	12.6	49.0	0.0	2.5	8.0	0.8	2.0	12.8	2.3	0.4	9.6	100.0	655
Outer Java-Bali II	6.5	45.4	1.3	10.3	2.5	2.2	3.4	11.4	4.5	1.2	11.1	100.0	2,207
Riau	5.1	36.1	0.7	8.9	2.0	7.2	5.4	21.6	5.0	1.3	6.8	100.0	344
Jambi	4.0	38.4	0.1	2.4	0.8	3.3	4.1	16.4	13.5	0.4	16.5	100.0	247
Bengkulu	3.0	30.9	0.2	12.6	0.5	0.7	4.3	33.6	5.1	0.6	8.2	100.0	117
East Nusa Tenggara	5.5	52.1	2.4	18.4	2.0	2.4	0.7	3.1	1.5	2.2	9.5	100.0	367
East Timor	19.8	42.8	2.0	3.0	0.1	0.5	0.2	1.6	1.4	0.8	27.7	100.0	116
Central Kalimantan	4.3	54.6	1.4	1.6	1.2	0.8	0.5	19.8	3.3	1.7	10.9	100.0	153
East Kalimantan	8.0	53.0	0.0	6.6	8.5	1.0	7.1	12.1	0.3	0.0	3.4	100.0	223
Central Sulawesi	8.5	51.1	0.7	11.7	1.2	0.1	1.1	7.2	3.0	3.5	11.6	100.0	177
Southeast Sulawesi	6.3	43.4	0.8	29.7	2.5	0.0	1.3	5.3	6.2	0.6	4.0	100.0	117
Maluku	3.9	40.3	0.6	7.0	6.7	0.8	5.7	3.2	8.7	1.4	21.6	100.0	173
Irian Jaya	8.5	53.6	5.9	11.8	0.3	0.2	5.0	1.8	1.1	0.2	11.4	100.0	173
Total	4.2	39.3	2.0	6.3	3.0	3.3	3.9	27.2	2.7	0.6	7.4	100.0	16,217

TBA = Traditional birth attendant

Table 10.3 also shows that four in ten pregnant women started having an antenatal check, as recommended, in the first trimester, while more than half (52 percent) had their first antenatal care visit in the second and third trimester. Eleven percent of births were to mothers who had no professional antenatal care. The median number of months at the first antenatal care visit was 3.3 months, which means that half of the pregnant women had their first antenatal care earlier than 3.3 months of pregnancy.



**Table 10.3** Number of antenatal care visits and stage of pregnancy

Percent distribution of live births in the five years preceding the survey by number of antenatal care (ANC) visits, and by the stage of pregnancy at the time of the first visit, according to type of antenatal care, Indonesia 1997

Antenatal care indicator	Any antenatal care	Any antenatal care from a medical professional <sup>1</sup>
<b>Number of ANC visits</b>		
0	7.4	10.6
1	3.4	2.9
2-3	18.2	16.8
4-6	27.7	26.8
7-9	24.0	23.7
10+	18.7	18.6
Don't know/missing	0.7	0.6
Total	100.0	100.0
Median	6.6	6.6
<b>Number of months pregnant at time of first ANC visit</b>		
No antenatal care	7.4	10.6
0-2 months	37.8	37.1
3-5 months	44.8	43.3
6+ months	9.6	8.6
Don't know/missing	0.4	0.4
Total	100.0	100.0
Median	3.3	3.3
Number of births	16,217	16,217

<sup>1</sup> Medical professional includes doctor, nurse, and midwife.

### 10.3 Tetanus Toxoid Vaccination

Immunization of pregnant women is a coordinated activity of the Expanded Program on Immunization (EPI) and the maternal and child health care (MCH) units in the Ministry of Health, which recommends that women receive two tetanus toxoid injections during the first pregnancy. Booster injections are given once during each subsequent pregnancy to maintain full protection. In recent years, tetanus toxoid immunization was also given to women before marriage, so that any pregnancy occurring within 3 years of their marriage would be protected against tetanus. Antenatal cards, on which tetanus toxoid immunizations are recorded, are distributed to every pregnant woman as a lifetime pregnancy and delivery history record keeper.

Among 16,217 live births in the five years preceding the survey, 53 percent were to mothers who received antenatal cards. Antenatal card coverage is higher in urban areas than in rural areas (62 percent compared with 50 percent). Women in Java-Bali are more likely to have an antenatal card than women in the Outer Islands of Java-Bali (58 percent compared with 45 and 53 percent). The percentage of mothers with antenatal cards is higher among those with higher education (Table 10.4.1).

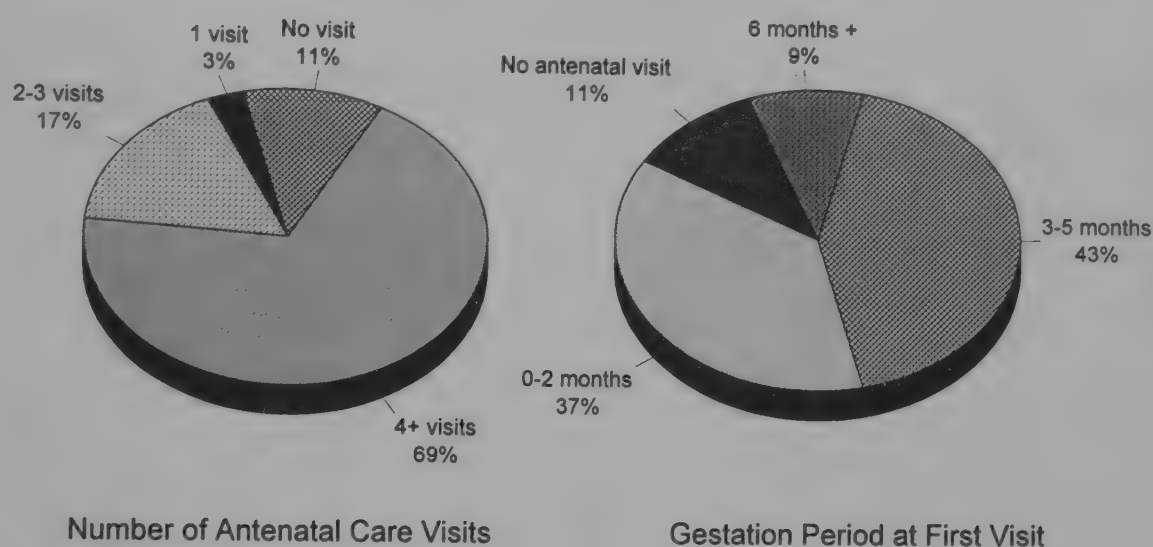
Since the findings above show that antenatal cards were not widely distributed, tetanus toxoid immunization coverage cannot be estimated from vaccination cards alone. Respondents' recall

is used to supplement information on immunization status. As a result, the proportion of births that are fully protected against tetanus may be underestimated. In addition, some women may have received tetanus toxoid immunization before marriage or during a previous pregnancy, so they might not need another injection or a booster immunization. On the other hand, women may incorrectly report other types of injections as tetanus immunization, which will overestimate the level of immunization coverage. It is difficult to evaluate the extent to which each of these biases exist in the DHS data. Therefore, the information on tetanus immunization should be regarded as an approximate indicator of the level of coverage.

Overall, of births in the five years before the survey, 53 percent were to mothers who received two or more tetanus toxoid injections during pregnancy, 18 percent received one injection, and 26 percent received no injection. The coverage of tetanus toxoid injection tends to decrease as the mother's age and the birth order increase (Table 10.4.1). The percentage of births unprotected against tetanus neonatorum is substantially higher in rural areas (29 percent) than in urban areas (18 percent) and is higher in the Outer Java-Bali regions (32 and 28 percent) than in Java-Bali (23 percent). Tetanus toxoid injection coverage increases with mother's education. While 45 percent of births to mothers with no education and 37 percent of births to mothers with some primary education never receive any tetanus toxoid injection, the corresponding proportion for births to mothers with some secondary education is only 16 percent.



**Figure 10.1**  
**Number of Antenatal Care Visits and Gestation**  
**Period at First Visit for Births in the**  
**Five Years Preceding the Survey**



IDHS97

In the five years preceding the survey, the proportion of births for which an antenatal card was presented varied significantly by province, from 21 percent in North Sumatra to 75 percent or more in DI Yogyakarta and Bali. Tetanus immunization coverage also varies among provinces. While less than 10 percent of births in Bali and North Sulawesi were to mothers who did not receive a tetanus toxoid injection during pregnancy, more than 50 percent of births in North Sumatra were to unimmunized mothers (Table 10.4.2).

#### 10.4 Iron Pills

Anemia during pregnancy is still prevalent in Indonesia. Iron pills are distributed to women during their antenatal care visits to health care services. The maternal health program of the Indonesian Ministry of Health recommends that pregnant women take at least 90 iron pills during their pregnancy. In order to evaluate this program, in the 1997 IDHS, all women who gave birth during the five years before the survey were asked whether they had received iron pills during their last pregnancy and, if so, how many they had taken.

Of the 13,170 births in the five years preceding the survey, 24 percent of the mothers took 90 or more iron pills during pregnancy, while 17 percent took none (Table 10.5). Older mothers, mothers of higher order births, and less educated mothers are less likely to take iron pills during their pregnancy.

Iron pills are better distributed in urban areas and in Java-Bali, than in other areas. For 20 percent or more of recent births in rural areas and in Outer Java-Bali, women did not take any iron pills during their pregnancy, while mothers in urban areas and in Java-Bali region took at least 90 iron pills during pregnancy for more than 30 percent of births.

Table 10.4.1 Tetanus toxoid vaccinations: background characteristics

Percent distribution of live births in the five years preceding the survey by number of tetanus toxoid injections received by mothers during pregnancy, and percentage for which mothers could show antenatal cards, according to background characteristics, Indonesia 1997

Background characteristic	Number of tetanus toxoid injections				Total	Number of births	Percent with antenatal card
	None	One dose	Two doses or more	Don't know/ Missing			
<b>Mother's age at birth</b>							
< 20	26.4	19.1	52.5	2.0	100.0	2,215	54.2
20-24	23.3	18.6	56.3	1.7	100.0	4,647	55.8
25-29	23.8	20.3	54.4	1.5	100.0	4,236	56.9
30-34	27.1	15.9	54.6	2.4	100.0	3,111	50.3
35+	36.2	17.4	43.6	2.9	100.0	2,007	43.5
<b>Birth order</b>							
1	21.4	19.1	58.0	1.6	100.0	5,314	59.9
2-3	23.3	18.8	55.7	2.2	100.0	6,581	56.1
4-6	32.3	18.0	47.7	1.9	100.0	3,314	44.3
7+	50.5	13.7	32.6	3.1	100.0	1,008	30.6
<b>Residence</b>							
Urban	17.8	18.9	61.6	1.7	100.0	4,373	61.9
Rural	29.3	18.2	50.4	2.1	100.0	11,844	50.2
<b>Region/Residence</b>							
Java-Bali	22.5	18.5	56.8	2.1	100.0	9,188	58.1
Urban	16.5	18.5	63.5	1.5	100.0	2,940	63.6
Rural	25.3	18.6	53.7	2.4	100.0	6,247	55.6
Outer Java-Bali I	32.3	18.5	47.4	1.8	100.0	4,821	44.5
Urban	22.3	18.3	56.9	2.5	100.0	984	56.1
Rural	34.9	18.5	44.9	1.7	100.0	3,837	41.6
Outer Java-Bali II	28.3	17.7	52.2	1.8	100.0	2,207	52.6
Urban	16.6	22.7	59.5	1.3	100.0	448	63.2
Rural	31.3	16.4	50.4	1.9	100.0	1,759	49.9
<b>Mother's education</b>							
No education	45.2	17.0	34.8	3.0	100.0	1,462	36.1
Some primary	37.2	17.2	43.5	2.1	100.0	4,067	43.1
Completed primary	23.0	17.9	57.2	1.8	100.0	5,262	55.3
Some secondary+	15.9	20.2	62.1	1.8	100.0	5,425	63.7
All births	26.2	18.4	53.4	2.0	100.0	16,217	53.3

While nine in ten mothers with no antenatal care and nine in ten mothers who receive antenatal care from a traditional birth attendant never get any iron pills during their pregnancy, only 8-11 percent of mothers who go to a government or a private health service facility for antenatal care get no iron pills during their pregnancy. Mothers who have their first antenatal visit in the first trimester are more likely to have taken 90 or more iron pills during their pregnancy than those who start antenatal care later.

**Table 10.4.2 Tetanus toxoid vaccinations: region and province**

Percent distribution of live births in the five years preceding the survey by number of tetanus toxoid injections received by mothers during pregnancy, and percentage for which mothers could show antenatal cards, according to region and province, Indonesia 1997

Region and province	Number of tetanus toxoid injections				Total	Number of births	Percent with antenatal card
	None	One dose	Two doses or more	Don't know/ Missing			
<b>Java-Bali</b>	22.5	18.5	56.8	2.1	100.0	9,188	58.1
DKI Jakarta	18.8	17.7	61.2	2.3	100.0	572	67.7
West Java	28.5	10.3	60.0	1.2	100.0	3,351	49.1
Central Java	16.0	22.6	57.3	4.1	100.0	2,385	53.9
DI Yogyakarta	10.6	31.5	57.2	0.7	100.0	181	75.0
East Java	23.6	23.5	51.2	1.7	100.0	2,497	68.8
Bali	7.3	36.1	55.2	1.5	100.0	202	81.7
<b>Outer Java-Bali I</b>	32.3	18.5	47.4	1.8	100.0	4,821	44.5
Dista Aceh	35.8	15.6	47.1	1.5	100.0	354	40.0
North Sumatra	52.2	13.3	31.8	2.8	100.0	1,267	20.8
West Sumatra	34.0	17.0	48.2	0.8	100.0	385	37.9
South Sumatra	24.9	13.5	60.8	0.7	100.0	516	49.4
Lampung	20.6	16.9	59.3	3.2	100.0	544	62.6
West Nusa Tenggara	26.6	28.9	43.2	1.3	100.0	371	62.4
West Kalimantan	30.2	16.2	52.1	1.6	100.0	324	49.4
South Kalimantan	27.9	19.3	52.4	0.4	100.0	214	45.7
North Sulawesi	8.8	28.4	62.0	0.5	100.0	192	69.8
South Sulawesi	18.5	28.5	51.4	1.7	100.0	655	57.9
<b>Outer Java-Bali II</b>	28.3	17.7	52.2	1.8	100.0	2,207	52.6
Riau	39.2	18.4	40.6	1.9	100.0	344	44.2
Jambi	37.0	14.9	42.6	5.5	100.0	247	40.3
Bengkulu	26.9	15.5	57.1	0.5	100.0	117	52.7
East Nusa Tenggara	17.2	14.3	67.5	1.0	100.0	367	61.0
East Timor	44.4	14.8	40.6	0.4	100.0	116	41.6
Central Kalimantan	35.8	22.8	40.5	0.8	100.0	153	38.3
East Kalimantan	13.5	25.2	60.9	0.5	100.0	223	64.3
Central Sulawesi	25.7	18.8	53.7	1.9	100.0	177	60.7
Southeast Sulawesi	17.5	13.8	67.5	1.3	100.0	117	63.9
Maluku	39.9	14.1	43.5	2.5	100.0	173	42.8
Irian Jaya	19.7	21.1	57.9	2.0	100.0	173	66.8
<b>Total</b>	26.2	18.4	53.4	2.0	100.0	16,217	53.3

## 10.5 Place of Delivery

Despite the growing availability of village delivery posts (*polindes*), four in five births in Indonesia are still delivered at home, including 7 percent delivered in a midwife's home (an increase of 2 percentage points since 1994). Only 9 percent of births in the five years preceding the survey were delivered in a government health service facility (government hospitals, village delivery posts, and health centers) and 19 percent were delivered in private hospitals or clinics (including the 7 percent delivered in a midwife's home) (Figure 10.2).



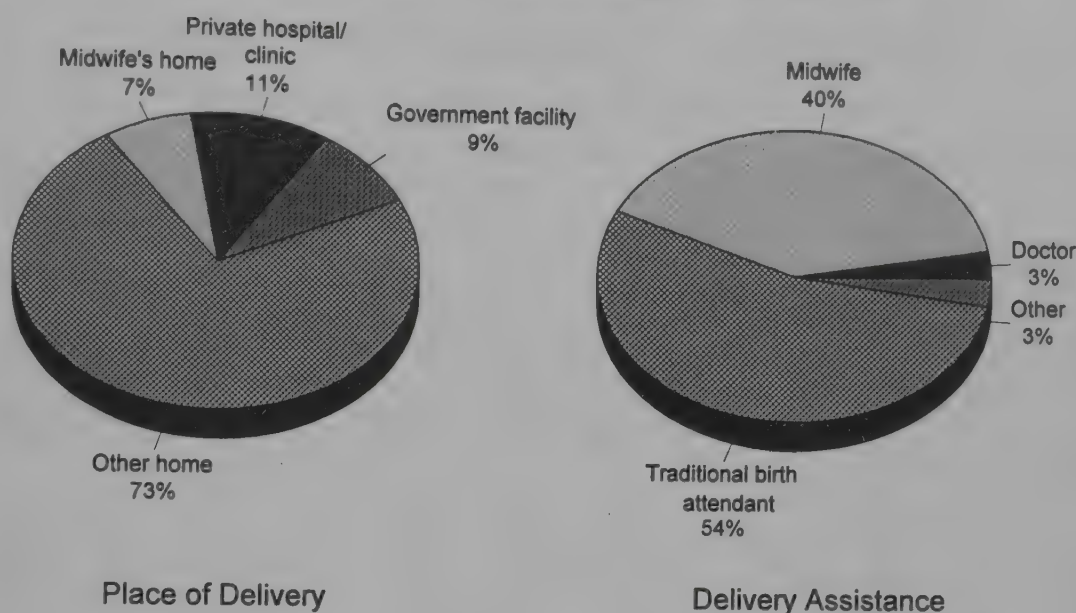
**Table 10.5 Iron tablets taken during pregnancy**

Percent distribution of women whose last birth occurred in the five years preceding the survey, by the number of iron tablets taken during the pregnancy, according to selected background characteristics, Indonesia 1997

Background characteristic	Number of iron tablets taken during pregnancy							Total	Number of women
	0	1-14	15-29	30-59	60-89	90+	Don't know		
<b>Mother's age at birth</b>									
< 20	15.3	8.4	12.2	20.7	13.5	22.8	7.2	100.0	1,778
20-24	15.7	7.8	9.7	21.7	12.7	23.8	8.6	100.0	3,662
25-29	14.5	7.8	9.0	18.3	12.8	28.0	9.7	100.0	3,431
30-34	17.7	7.6	10.9	18.0	11.6	24.4	9.8	100.0	2,542
35+	24.3	7.4	8.3	19.6	12.0	20.5	7.9	100.0	1,758
<b>Birth order</b>									
1	11.4	7.3	9.6	21.4	13.2	28.7	8.4	100.0	4,197
2-3	15.4	7.4	9.5	19.4	12.8	25.7	9.7	100.0	5,491
4-6	22.3	9.2	11.2	18.6	12.1	17.8	8.8	100.0	2,689
7+	37.5	8.0	9.1	16.6	8.6	15.0	5.3	100.0	793
<b>Residence</b>									
Urban	8.3	6.2	8.8	19.4	12.4	34.0	11.0	100.0	3,602
Rural	20.1	8.4	10.3	19.8	12.6	20.8	8.0	100.0	9,568
<b>Region/Residence</b>									
Java-Bali	13.6	6.5	10.5	16.8	12.9	31.1	8.5	100.0	7,777
Urban	7.6	5.4	8.8	17.0	10.8	39.9	10.4	100.0	2,486
Rural	16.4	7.0	11.2	16.7	13.9	27.0	7.7	100.0	5,291
Outer Java-Bali I	20.7	10.8	9.6	24.5	12.2	13.6	8.7	100.0	3,707
Urban	10.2	9.2	9.3	25.6	15.6	19.1	11.0	100.0	765
Rural	23.5	11.2	9.6	24.1	11.4	12.2	8.1	100.0	2,942
Outer Java-Bali II	23.4	7.2	7.7	22.3	11.5	17.3	10.5	100.0	1,685
Urban	8.7	5.9	6.8	22.7	16.5	24.5	15.0	100.0	350
Rural	27.3	7.6	8.0	22.2	10.1	15.4	9.3	100.0	1,335
<b>Mother's education</b>									
No education	37.1	9.1	10.2	14.3	8.1	14.1	7.1	100.0	1,150
Some primary	24.4	9.5	11.8	18.7	12.6	16.9	6.2	100.0	3,216
Completed primary	15.6	8.0	9.5	21.2	12.7	24.9	8.1	100.0	4,399
Some secondary+	7.4	6.0	8.8	20.3	13.5	32.2	11.9	100.0	4,406
<b>Number of months pregnant at first ANC visit</b>									
No antenatal care	92.9	2.1	0.5	1.7	0.9	0.7	1.2	100.0	1,190
0-2	6.3	5.2	7.4	18.7	14.3	37.4	10.8	100.0	5,020
3-5	10.3	8.5	13.0	23.6	14.0	21.5	9.1	100.0	5,773
6+	16.5	21.0	14.7	23.4	9.5	8.0	6.8	100.0	1,140
<b>Place of antenatal care</b>									
Government hospital	9.0	10.5	7.3	18.9	10.8	33.7	9.9	100.0	553
Health center	8.6	9.2	11.5	23.4	12.7	25.2	9.3	100.0	5,234
Delivery post	9.4	10.3	11.4	24.9	14.9	23.5	5.5	100.0	278
Health post	11.1	6.5	15.4	23.6	14.8	23.2	5.4	100.0	854
Private hospital	7.7	4.1	6.5	20.7	8.3	38.8	13.9	100.0	379
Private FP clinic	10.3	5.6	6.6	21.0	9.7	32.7	14.0	100.0	438
Private doctor	8.0	2.3	7.9	10.3	14.8	41.4	15.3	100.0	549
Private midwife	10.2	8.5	10.6	20.2	16.2	25.0	9.4	100.0	3,669
TBA visit	91.3	2.1	0.6	1.8	0.1	2.0	2.2	100.0	324
Other	42.8	17.1	7.1	15.2	10.4	2.9	4.3	100.0	68
No one	95.3	2.4	0.4	1.0	0.3	0.1	0.4	100.0	821
<b>Total</b>	16.9	7.8	9.9	19.7	12.5	24.4	8.8	100.0	13,170

Note: Totals include 47 women with missing information as to number of months pregnant at first ANC visit and 7 women with no information on place of antenatal care (ANC).  
TBA = Traditional birth attendant

**Figure 10.2**  
**Delivery Characteristics of Births in**  
**the Five Years Preceding the Survey**



IDHS97

Births to women in high-risk age groups—under 20 years or 35 years and over—are more likely to be delivered at a private home than births to women age 20-34. For women under age 20 the proportion is 83 percent, for those age 35 and over it is 78 percent, and for women age 20 to 34 it ranges from 67 to 72 percent. Higher order births are more frequently delivered at home—89 percent among seventh and higher order births compared with 65 percent among first order birth. This implies that a relatively large proportion of high-risk births are delivered at home (Table 10.6.1).

Births in rural areas are twice as likely to be delivered at home as those in urban areas (84 percent compared with 41 percent). Fifteen percent of births in urban areas are delivered in a midwife's home. The percentage of home deliveries in the Outer Java-Bali regions (76 and 82 percent) is higher than that in Java-Bali (69 percent). Deliveries in a midwife's home are very popular in urban Java-Bali (20 percent). Births to mothers who have no education are twice as likely to be delivered at home as births to mothers who have some secondary education (92 percent and 48 percent, respectively). The utilization of private hospitals or clinics for delivery is considerably higher in urban than in rural areas. It is also higher for first through third deliveries, and among births to mothers with some secondary education.

Significant variations are found in the place of delivery by province (Table 10.6.2). A majority of births (more than 60 percent) are delivered at home in all provinces except in DKI Jakarta (20 percent), DI Yogyakarta (43 percent), Bali (28 percent), and West Sumatra (51 percent). In DKI Jakarta, 80 percent of births occur in health facilities, among which 56 percent are delivered in private hospitals, clinics, or midwife's homes and 23 percent in government hospitals or health centers. Similarly, in DI Yogyakarta, Bali, and West Sumatra, more births are delivered in private facilities than in government facilities.

Table 10.6.1 Place of delivery: background characteristics

Percent distribution of live births in the five years preceding the survey by place of delivery, according to selected background characteristics, Indonesia 1997

Background characteristic	Place of delivery									Total	Number of births
	Home			Government			Private				
	Respond-ent's	Other's	Mid-wife's	Hos-pital	Health center	Deliv-ery post	Hos-pital	Clinic	Other private		
<b>Mother's age at birth</b>											
< 20	76.3	6.4	4.3	3.8	2.6	0.2	1.9	4.5	0.0	100.0	2,215
20-24	65.6	6.2	7.5	5.9	2.7	0.1	4.2	7.2	0.5	100.0	4,647
25-29	63.2	3.4	7.9	7.8	2.3	0.2	6.7	8.2	0.3	100.0	4,236
30-34	68.4	2.8	6.7	6.4	2.2	0.4	5.3	7.6	0.1	100.0	3,111
35+	75.8	2.3	4.8	6.1	1.3	0.5	3.8	5.3	0.0	100.0	2,007
<b>Birth order</b>											
1	58.3	6.4	8.3	8.3	3.1	0.2	6.1	8.9	0.3	100.0	5,314
2-3	67.6	3.8	7.2	6.2	2.1	0.2	5.5	7.1	0.3	100.0	6,581
4-6	79.8	3.0	4.2	4.0	1.7	0.3	2.1	4.7	0.1	100.0	3,314
7+	87.5	1.5	2.5	2.7	1.8	0.5	0.8	2.8	0.0	100.0	1,008
<b>Residence</b>											
Urban	35.3	5.2	14.8	11.8	3.9	0.3	13.4	14.9	0.4	100.0	4,373
Rural	80.3	4.0	3.7	4.2	1.7	0.2	1.5	4.0	0.2	100.0	11,844
<b>Region/Residence</b>											
Java-Bali	65.8	2.8	9.7	5.8	2.5	0.2	5.2	7.6	0.3	100.0	9,188
Urban	34.3	4.6	19.7	9.9	4.4	0.4	12.9	13.1	0.4	100.0	2,940
Rural	80.5	1.9	5.0	3.9	1.6	0.2	1.7	5.1	0.3	100.0	6,247
Outer Java-Bali I	69.4	6.5	3.5	6.3	2.4	0.4	4.2	7.1	0.2	100.0	4,821
Urban	35.0	6.3	4.9	13.9	2.9	0.0	16.0	20.5	0.4	100.0	984
Rural	78.3	6.6	3.2	4.3	2.2	0.5	1.2	3.6	0.1	100.0	3,837
Outer Java-Bali II	75.8	6.1	1.1	8.0	1.6	0.0	3.6	3.7	0.1	100.0	2,207
Urban	42.0	6.3	4.6	19.5	2.5	0.1	11.1	14.0	0.0	100.0	448
Rural	84.4	6.0	0.2	5.0	1.3	0.0	1.7	1.1	0.1	100.0	1,759
<b>Mother's education</b>											
No education	90.6	1.9	2.3	1.7	0.8	0.1	1.2	1.3	0.1	100.0	1,462
Some primary	84.9	3.8	3.6	2.6	1.9	0.1	0.9	2.1	0.2	100.0	4,067
Completed primary	75.8	4.4	5.7	4.1	2.2	0.3	1.7	5.5	0.3	100.0	5,262
Some secondary+	42.5	5.4	11.2	12.2	3.2	0.3	11.5	13.5	0.3	100.0	5,425
<b>Number of antenatal care visits</b>											
0	94.4	3.5	0.4	0.3	0.3	0.0	0.4	0.5	0.1	100.0	1,717
1-3	84.5	5.0	2.1	2.9	1.7	0.1	1.6	2.1	0.0	100.0	3,184
4+	59.7	4.3	9.0	8.1	2.8	0.3	6.3	9.2	0.3	100.0	11,214
Don't know/missing	62.9	3.6	1.8	2.9	2.7	0.0	4.4	20.7	0.9	100.0	91
Total	68.3	4.3	6.7	6.2	2.3	0.2	4.7	6.9	0.2	100.0	16,217



Table 10.6.2 Place of delivery: region and province

Percent distribution of live births in the five years preceding the survey by place of delivery, according to region and province, Indonesia 1997

Region and province	Place of delivery									Total	Number of births
	Home			Government			Private				
	Respondent's	Other's	Mid-wife's	Hospital	Health center	Delivery post	Hospital	Clinic	Other private		
<b>Java-Bali</b>	65.8	2.8	9.7	5.8	2.5	0.2	5.2	7.6	0.3	100.0	9,188
DKI Jakarta	13.2	6.8	21.6	12.0	11.2	0.0	14.3	20.1	0.4	100.0	572
West Java	77.9	3.0	8.9	3.5	0.7	0.1	3.1	2.6	0.1	100.0	3,351
Central Java	71.1	1.9	5.9	5.3	2.1	0.0	4.3	9.0	0.2	100.0	2,485
DI Yogyakarta	41.9	0.7	17.9	14.2	4.6	0.0	7.5	13.3	0.0	100.0	181
East Java	61.3	2.5	9.3	6.5	2.6	0.7	6.6	9.7	0.7	100.0	2,497
Bali	26.1	2.0	31.6	16.8	8.4	0.2	4.7	9.6	0.6	100.0	202
<b>Outer Java-Bali I</b>	69.4	6.5	3.5	6.3	2.4	0.4	4.2	7.1	0.2	100.0	4,821
Dista Aceh	85.6	2.4	0.0	4.4	0.7	0.0	0.6	6.4	0.0	100.0	354
North Sumatra	70.2	7.6	1.3	4.6	1.7	0.6	3.9	10.1	0.0	100.0	1,267
West Sumatra	42.8	8.5	19.4	9.0	6.3	1.6	3.9	8.2	0.3	100.0	385
South Sumatra	65.5	5.7	5.2	5.0	0.5	0.3	4.2	13.4	0.1	100.0	516
Lampung	72.3	5.8	6.6	2.9	0.4	0.0	1.1	10.8	0.0	100.0	544
West Nusa Tenggara	75.7	9.0	0.5	6.3	4.2	0.4	2.2	0.5	1.0	100.0	371
West Kalimantan	79.1	4.3	0.4	6.2	1.8	0.0	3.1	5.0	0.1	100.0	324
South Kalimantan	81.8	7.6	0.9	6.3	0.4	0.0	2.0	1.0	0.0	100.0	214
North Sulawesi	68.8	3.5	0.5	10.6	5.0	0.4	6.2	4.9	0.2	100.0	192
South Sulawesi	63.3	7.0	1.5	11.4	4.4	0.0	11.5	0.7	0.1	100.0	655
<b>Outer Java-Bali II</b>	75.8	6.1	1.1	8.0	1.6	0.0	3.6	3.7	0.1	100.0	2,207
Riau	66.9	9.7	0.7	3.7	1.1	0.1	4.2	13.7	0.0	100.0	344
Jambi	77.8	6.1	0.8	2.6	3.6	0.0	1.5	7.5	0.1	100.0	247
Bengkulu	84.5	6.8	0.2	4.0	0.2	0.5	1.1	1.6	0.9	100.0	117
East Nusa Tenggara	82.5	2.8	0.1	8.4	1.6	0.0	3.2	1.1	0.1	100.0	367
East Timor	83.5	0.7	0.1	13.6	0.9	0.0	0.4	0.7	0.0	100.0	116
Central Kalimantan	81.0	12.9	0.2	5.0	0.2	0.0	0.5	0.3	0.0	100.0	153
East Kalimantan	54.2	7.2	7.9	15.7	1.8	0.0	9.9	3.2	0.0	100.0	223
Central Sulawesi	77.6	11.5	0.2	7.7	1.0	0.0	1.5	0.1	0.0	100.0	177
Southeast Sulawesi	91.0	3.4	0.2	3.4	0.4	0.0	1.6	0.0	0.0	100.0	117
Maluku	83.4	0.9	0.2	6.0	0.2	0.0	9.4	0.0	0.0	100.0	173
Irian Jaya	68.7	2.7	0.2	20.5	4.5	0.0	2.4	0.8	0.2	100.0	173
<b>Total</b>	68.3	4.3	6.7	6.2	2.3	0.2	4.7	6.9	0.2	100.0	16,217

## 10.6 Assistance during Delivery

In the survey, respondents were asked about all types of assistance attending the delivery. If more than one type of delivery attendant was recorded, only the least qualified delivery attendant was considered for tabulation, since they are usually the first choice to assist during delivery. Only complicated cases are referred to the more qualified attendant.

Forty-three percent of births in the five years before the survey were assisted by a doctor or a nurse/midwife, and 57 percent of births were assisted by non-medical staff—54 percent by a traditional birth attendant and 3 percent by a relative (Table 10.7.1 and Figure 10.2). Births to young mothers, high birth orders, those in rural areas, those to mothers with no education, and to mothers who receive no antenatal care are more likely to be assisted by non-medical staff than other births.

Table 10.7.1 Assistance during delivery: background characteristics

Percent distribution of live births in the five years preceding the survey by type of assistance during delivery, according to selected background characteristics, Indonesia 1997

Background characteristic	Assistance during delivery <sup>1</sup>						Total	Number of births
	Doctor	Midwife	Traditional birth attendant	Relative	Other	No one		
Mother's age at birth								
< 20	0.6	31.2	65.7	2.4	0.0	0.0	100.0	2,215
20-24	2.9	42.0	52.5	2.3	0.1	0.1	100.0	4,647
25-29	5.0	44.0	48.3	2.4	0.1	0.2	100.0	4,236
30-34	3.1	41.9	52.5	2.2	0.1	0.4	100.0	3,111
35+	3.4	33.6	58.7	3.5	0.0	0.8	100.0	2,007
Birth order								
1	4.6	46.5	47.1	1.7	0.1	0.1	100.0	5,314
2-3	3.3	41.4	52.6	2.3	0.0	0.1	100.0	6,581
4-6	1.5	31.1	63.8	3.0	0.1	0.6	100.0	3,314
7+	0.7	25.8	65.8	6.3	0.2	1.2	100.0	1,008
Residence								
Urban	7.9	68.5	23.1	0.4	0.0	0.1	100.0	4,373
Rural	1.5	29.5	65.3	3.2	0.1	0.3	100.0	11,844
Region/Residence								
Java-Bali	3.8	38.1	57.2	0.7	0.0	0.2	100.0	9,188
Urban	7.9	65.3	26.6	0.0	0.0	0.1	100.0	2,940
Rural	1.9	25.4	71.4	1.0	0.0	0.2	100.0	6,247
Outer Java-Bali I	2.7	45.9	48.1	3.0	0.1	0.3	100.0	4,821
Urban	9.1	76.0	14.3	0.7	0.0	0.0	100.0	984
Rural	1.1	38.1	56.7	3.5	0.1	0.4	100.0	3,837
Outer Java-Bali II	1.8	35.1	53.4	9.0	0.4	0.3	100.0	2,207
Urban	4.9	73.2	19.2	2.1	0.4	0.1	100.0	448
Rural	1.0	25.4	62.1	10.7	0.4	0.4	100.0	1,759
Mother's education								
No education	1.2	14.2	73.9	9.4	0.2	1.2	100.0	1,462
Some primary	0.9	22.0	73.8	2.8	0.1	0.4	100.0	4,067
Completed primary	1.5	34.7	62.0	1.6	0.1	0.1	100.0	5,262
Some secondary+	7.3	65.6	25.9	1.1	0.0	0.0	100.0	5,425
Number of antenatal care visits								
0	0.4	5.9	83.3	9.0	0.3	1.0	100.0	1,717
1-3	1.0	25.8	69.3	3.7	0.0	0.3	100.0	3,184
4+	4.3	49.4	45.1	1.1	0.0	0.2	100.0	11,249
Don't know/missing	5.5	40.6	48.3	5.6	0.0	0.0	100.0	91
Total	3.2	40.0	54.0	2.5	0.1	0.3	100.0	16,217

<sup>1</sup> If the respondent mentioned more than one attendant, only the *least* qualified attendant was considered (see text for explanation).

Traditional birth attendants still have a very important role in delivery assistance, especially in the rural areas (65 percent), in the Java-Bali region (57 percent), to mothers with no education or some primary education (74 percent), as well as to mothers with no antenatal care (83 percent).

The coverage of deliveries assisted by traditional birth attendants varies among provinces, from 9 percent in DKI Jakarta to 78 percent in West Nusa Tenggara (Table 10.7.2). Overall, 3 percent of births were assisted by relatives, which may have greater risk for the mother and baby, than those assisted by traditional birth attendants, because relatives generally have no training and are less experienced in assisting delivery than traditional birth attendants. Some provinces have a high prevalence of relative-assisted deliveries, e.g., East Nusa Tenggara (11 percent), Irian Jaya (26 percent), and East Timor (57 percent). The high prevalence of deliveries assisted by relatives in Irian Jaya and East Timor was also noted in past IDHS.

Table 10.7.2 Assistance during delivery: region and province

Percent distribution of live births in the five years preceding the survey by type of assistance during delivery, according to region and province, Indonesia 1997

Region and province	Assistance during delivery <sup>1</sup>						Total	Number of births
	Doctor	Midwife	Traditional birth attendant	Relative	Other	No one		
<b>Java-Bali</b>	3.8	38.1	57.2	0.7	0.0	0.2	100.0	9,188
DKI Jakarta	13.0	77.6	9.4	0.0	0.0	0.0	100.0	572
West Java	2.3	28.3	69.2	0.2	0.0	0.0	100.0	3,351
Central Java	4.2	33.1	61.3	0.7	0.0	0.8	100.0	2,385
DI Yogyakarta	3.2	57.8	39.0	0.0	0.0	0.0	100.0	181
East Java	3.4	43.0	52.5	1.1	0.0	0.0	100.0	2,497
Bali	3.5	74.1	16.4	5.8	0.1	0.0	100.0	202
<b>Outer Java-Bali I</b>	2.7	45.9	48.1	3.0	0.1	0.3	100.0	4,821
Dista Aceh	1.5	37.9	59.6	1.0	0.0	0.0	100.0	354
North Sumatra	4.2	57.7	30.9	6.0	0.2	1.0	100.0	1,267
West Sumatra	1.7	67.6	30.7	0.0	0.0	0.0	100.0	385
South Sumatra	3.9	50.4	44.9	0.8	0.0	0.0	100.0	516
Lampung	0.9	39.0	58.8	1.1	0.0	0.2	100.0	544
West Nusa Tenggara	0.8	19.8	78.4	0.9	0.0	0.1	100.0	371
West Kalimantan	1.9	35.0	59.8	3.3	0.0	0.0	100.0	324
South Kalimantan	3.1	37.3	59.5	0.0	0.0	0.0	100.0	214
North Sulawesi	2.1	43.6	53.4	1.0	0.0	0.0	100.0	192
South Sulawesi	3.2	40.1	50.7	5.6	0.0	0.4	100.0	655
<b>Outer Java-Bali II</b>	1.8	35.1	53.4	9.0	0.4	0.3	100.0	2,207
Riau	1.7	42.5	54.4	1.3	0.1	0.0	100.0	344
Jambi	1.8	34.5	63.4	0.3	0.0	0.0	100.0	247
Bengkulu	1.3	41.0	51.1	6.1	0.1	0.3	100.0	117
East Nusa Tenggara	0.6	25.9	62.1	10.5	0.4	0.5	100.0	367
East Timor	2.4	23.4	17.0	57.1	0.1	0.0	100.0	116
Central Kalimantan	0.3	37.9	58.4	2.7	0.7	0.0	100.0	153
East Kalimantan	6.6	56.2	33.7	2.9	0.2	0.4	100.0	223
Central Sulawesi	0.5	22.1	67.6	9.5	0.3	0.0	100.0	177
Southeast Sulawesi	1.9	23.4	70.9	3.3	0.0	0.4	100.0	117
Maluku	1.5	26.3	68.7	3.4	0.0	0.1	100.0	173
Irian Jaya	1.1	45.5	23.1	25.5	2.7	2.1	100.0	173
<b>Total</b>	3.2	40.0	54.0	2.5	0.1	0.3	100.0	16,217

<sup>1</sup> If the respondent mentioned more than one attendant, only the *least* qualified attendant was considered (see text for explanation).



## 10.7 Delivery Characteristics

In Indonesia, caesarean sections generally are performed under certain medical indications and to terminate complicated deliveries. In this survey, only 4 percent of births were delivered by a caesarean section (Table 10.8.1). The percentage of caesarean section is higher among older women, lower birth orders, and mothers with some secondary education. In urban areas, 6 percent of births were delivered by a caesarean section, compared to 4 percent in rural areas. Deliveries in Java-Bali are more likely to be by a caesarean section than in Outer Java-Bali regions (5 percent compared with only 3 percent).

Table 10.8.1 Delivery characteristics: background characteristics

Among births in the five years preceding the survey, the percentage of deliveries by caesarean section, the percentage of premature births, and the percent distribution by birth weight and by the mother's estimate of baby's size at birth, according to background characteristics, Indonesia 1997

Background characteristic	Delivery by C-section	Pre-mature birth	Birth weight			Size of child at birth				Total	Number of births
			Less than 2.5 kg	2.5 kg or more	Don't know/ Missing	Very small	Smaller than average	Average or larger	Don't know/ Missing		
Mother's age at birth											
<20	2.6	4.7	11.9	88.1	43.3	1.9	17.2	78.4	2.6	100.0	2,215
20-24	4.1	3.6	7.5	92.5	37.0	1.6	12.2	83.8	2.4	100.0	4,647
25-29	4.3	2.3	7.1	92.9	34.2	1.1	10.7	86.2	2.0	100.0	4,236
30-34	5.2	2.0	7.5	92.5	38.5	2.1	11.7	83.0	3.2	100.0	3,111
35+	5.0	1.7	5.1	94.9	44.4	1.6	11.0	85.9	1.5	100.0	2,007
Birth order											
1	5.2	4.7	9.6	90.4	30.5	1.5	15.1	81.4	2.0	100.0	5,314
2-3	4.2	2.4	5.9	94.1	36.4	1.6	10.6	85.9	1.8	100.0	6,581
4-6	3.1	1.3	7.7	92.3	48.3	1.7	11.1	83.8	3.3	100.0	3,314
7+	3.6	1.1	8.0	92.0	60.6	1.7	11.3	82.8	4.2	100.0	1,008
Residence											
Urban	6.3	4.0	6.6	93.4	10.1	1.4	11.2	86.8	0.7	100.0	4,373
Rural	3.5	2.5	8.4	91.6	48.7	1.7	12.6	82.7	3.0	100.0	11,844
Region/Residence											
Java-Bali	5.1	3.5	7.9	92.1	33.4	1.7	13.8	82.0	2.5	100.0	9,188
Urban	5.9	4.5	6.6	93.4	8.5	1.5	11.2	86.7	0.6	100.0	2,940
Rural	4.7	3.1	8.8	91.2	45.0	1.8	15.0	79.8	3.4	100.0	6,247
Outer Java-Bali I	3.2	2.0	6.9	93.1	42.4	1.6	9.8	86.7	2.0	100.0	4,821
Urban	7.1	3.0	5.9	94.1	11.2	1.2	10.6	87.4	0.8	100.0	984
Rural	2.2	1.7	7.3	92.7	50.4	1.7	9.5	86.5	2.3	100.0	3,837
Outer Java-Bali II	3.3	2.3	8.8	91.2	49.9	1.3	11.3	85.0	2.4	100.0	2,207
Urban	7.7	3.6	7.3	92.7	18.3	0.9	12.5	86.0	0.7	100.0	448
Rural	2.1	1.9	9.5	90.5	58.0	1.5	11.0	84.8	2.8	100.0	1,759
Mother's education											
No education	1.9	1.2	11.4	88.6	68.6	1.7	12.6	80.9	4.7	100.0	1,462
Some primary	3.0	2.0	10.9	89.1	55.2	1.9	14.7	79.4	4.0	100.0	4,067
Completed primary	4.3	3.0	7.9	92.1	39.1	1.8	12.9	83.4	1.8	100.0	5,262
Some secondary+	5.9	3.9	5.8	94.2	16.8	1.2	9.5	88.4	0.9	100.0	5,425
Total	4.3	2.9	7.7	92.3	38.4	1.6	12.2	83.8	2.3	100.0	16,217

In some provinces, caesarean sections were more frequently performed than in others, i.e., 8 percent or more in DKI Jakarta, Central Java, and East Kalimantan, compared with less than 2 percent in West Kalimantan, East Timor, Central Kalimantan, and Maluku (Table 10.8.2).

**Table 10.8.2 Delivery characteristics: region and province**

Among births in the five years preceding the survey, the percentage of deliveries by caesarean section, the percentage of premature births, and the percent distribution by birth weight and by the mother's estimate of baby's size at birth, according to region and province, Indonesia 1997

Region and province	Delivery by C-section	Pre-mature birth	Birth weight			Size of child at birth				Total	Number of births
			Less than 2.5 kg	2.5 kg or more	Don't know/ Missing	Very small	Smaller than average	Average or larger	Don't know/ Missing		
<b>Java-Bali</b>	5.1	3.5	7.9	92.1	33.4	1.7	13.8	82.0	2.5	100.0	9,188
DKI Jakarta	8.4	4.5	6.3	93.7	4.7	3.6	10.5	85.0	0.9	100.0	572
West Java	2.1	3.2	10.4	89.6	42.3	2.5	11.9	80.9	4.6	100.0	3,351
Central Java	9.3	2.7	6.5	93.5	24.4	0.7	14.6	82.1	2.6	100.0	2,385
DI Yogyakarta	4.2	2.8	4.9	95.1	15.6	0.7	5.8	93.1	0.4	100.0	181
East Java	4.3	4.4	7.1	92.9	39.2	1.2	17.2	81.3	0.3	100.0	2,497
Bali	6.7	4.2	8.0	92.0	19.2	1.4	9.2	88.1	1.3	100.0	202
<b>Outer Java-Bali I</b>	3.2	2.0	6.9	93.1	42.4	1.6	9.8	86.7	2.0	100.0	4,821
Dista Aceh	3.4	1.1	3.6	96.4	63.6	0.2	9.9	89.0	0.9	100.0	354
North Sumatra	2.9	1.0	3.7	96.3	45.6	0.9	6.6	89.2	3.3	100.0	1,267
West Sumatra	5.2	3.6	5.8	94.2	21.7	0.6	11.4	86.1	1.9	100.0	385
South Sumatra	4.4	2.9	8.3	91.7	34.7	1.6	11.5	86.1	0.8	100.0	516
Lampung	2.3	2.3	5.1	94.9	47.7	1.5	9.5	88.2	0.8	100.0	544
West Nusa Tenggara	2.3	2.2	7.7	92.3	34.5	1.4	11.0	85.4	2.3	100.0	371
West Kalimantan	1.7	1.5	10.7	89.3	48.4	1.4	11.0	86.9	0.7	100.0	324
South Kalimantan	2.5	1.9	7.1	92.9	36.9	2.3	7.2	83.1	7.5	100.0	214
North Sulawesi	2.9	3.0	7.0	93.0	48.2	3.7	10.0	86.1	0.2	100.0	192
South Sulawesi	4.0	2.0	12.3	87.7	40.4	3.6	13.0	82.1	1.3	100.0	655
<b>Outer Java-Bali II</b>	3.3	2.3	8.8	91.2	49.9	1.3	11.3	85.0	2.4	100.0	2,207
Riau	3.3	1.8	6.5	93.5	45.0	0.8	13.0	85.5	0.6	100.0	344
Jambi	2.3	1.7	4.5	95.5	54.1	0.6	11.0	88.3	0.1	100.0	247
Bengkulu	2.7	1.4	4.6	95.4	41.8	1.6	10.1	86.5	1.9	100.0	117
East Nusa Tenggara	2.3	2.3	13.1	86.9	54.9	0.9	11.8	85.7	1.6	100.0	367
East Timor	0.9	0.4	6.0	94.0	79.5	0.2	1.9	92.7	5.2	100.0	116
Central Kalimantan	1.7	2.2	10.8	89.2	49.8	2.1	9.1	85.2	3.5	100.0	153
East Kalimantan	10.1	4.9	8.5	91.5	22.2	2.8	17.6	79.5	0.1	100.0	223
Central Sulawesi	2.5	2.9	15.6	84.4	39.6	4.0	16.3	71.1	8.5	100.0	177
Southeast Sulawesi	2.3	2.1	6.6	93.4	59.7	0.4	10.5	85.2	3.8	100.0	117
Maluku	1.9	1.2	6.4	93.6	62.7	0.7	7.1	87.4	4.7	100.0	173
Irian Jaya	4.0	3.2	7.9	92.1	55.6	1.0	7.1	90.7	1.2	100.0	173
<b>Total</b>	4.3	2.9	7.7	92.3	38.4	1.6	12.2	83.8	2.3	100.0	16,217

According to respondents' reports, about 3 percent of births were delivered prematurely. This figure is relatively low in comparison to the actual percentage of low birth weight deliveries (8 percent) and the percentage of newborns reported as small by their mothers (14 percent).

Since most deliveries are attended by traditional birth attendants at home, birth weights were not reported for 38 percent of births in the 1997 IDHS. This proportion is five times higher in rural than in urban areas (48 percent and 10 percent, respectively). Among babies who were weighed at birth, 8 percent were under 2.5 kilograms (i.e., low birth weight). The prevalence of low birth weight is higher among children born to mothers less than 20 years than among those born to older mothers (12 percent compared with 8 percent or less). The prevalence of low birth weight fluctuates with birth order. It is high (10 percent) among first-born children, declines to 6 percent among second and third children, and increases again to 8 percent among fourth and higher order births.



The prevalence of low birth weight declines as mother's educational level increases; 11-12 percent among children born to mothers with no education or some primary education, compared with 8 percent or less among children born to mothers with complete primary or higher education.

There is a slight difference in the prevalence of births with low birth weight by area of residence—8 percent in rural areas and 7 percent in urban areas. In the Outer Java-Bali II region, 9 percent of births weighed less than 2.5 kilograms, compared with 8 percent in Java-Bali and 7 percent in Outer Java-Bali I region.

Survey respondents were asked their perception of the size of their newborns. Approximately 14 percent of births were perceived by their mothers as being either *very small* or *smaller than average*. Younger mothers and those with less education are more likely to report that their newborn is *smaller than average* (Table 10.8.1).

The prevalence of low birth weight ranges between 10 and 16 percent in 6 provinces, namely West Java, West Kalimantan, South Sulawesi, East Nusa Tenggara, Central Kalimantan, and Central Sulawesi (Table 10.8.2).

## 10.8 Complications of Delivery

To identify complications associated with delivery, respondents were asked about certain signs and symptoms that they had experienced to all live births during the five years prior to the survey. Table 10.9 shows that 26 percent of births were accompanied by complications at delivery. Prolonged labor was reported for 22 percent of births, excessive bleeding for 7 percent and, vaginal infection for 4 percent. Two percent of births were accompanied with maternal convulsions.

In general, delivery by a medical professional is more likely to be reported involving complications, in particular prolonged labor and excessive bleeding (Table 10.9 bottom panel). As expected, the prevalence of delivery complications is higher (35 percent) among deliveries with caesarian section, mostly due to prolonged labor (25 percent) and excessive bleeding (14 percent). Among deliveries resulting in neonatal deaths, 38 percent were accompanied with complications including prolonged labor (32 percent), excessive bleeding (13 percent), vaginal infection (13 percent), and maternal convulsions (4 percent).

There are negligible differences in the prevalence of delivery complications by respondents' type of residence.



**Table 10.9 Complications of delivery**

Percentage of live births in the five years preceding the survey for which respondents had complications associated with delivery, by type of complication, residence, and selected medical maternity care indicators, Indonesia 1997

Medical maternity care indicator	Type of complication					Number of births
	Prolonged labor	Excessive bleeding	Vaginal infection	Convulsions	None	
URBAN						
Antenatal care/ delivery assistance <sup>1</sup>						
Both ANC and DA	23.2	5.9	2.2	1.3	72.8	3,452
ANC only	21.1	5.5	1.6	0.9	77.0	800
DA only	(34.4)	(7.3)	(7.5)	(0.0)	(60.5)	17
No ANC or DA	27.9	3.2	5.0	7.7	70.0	103
Neonatal death	30.4	9.1	9.7	1.8	65.8	65
Delivery by C-section	26.6	6.8	4.7	2.1	67.0	276
Total	22.9	5.8	2.2	1.3	73.4	4,373
RURAL						
Antenatal care/ delivery assistance <sup>1</sup>						
Both ANC and DA	25.0	7.8	4.9	2.6	70.7	4,373
ANC only	18.2	7.1	3.7	1.3	77.6	5,865
DA only	33.2	19.2	7.0	8.1	51.6	125
No ANC or DA	21.8	8.5	5.1	2.1	73.5	1,481
Neonatal death	33.0	13.7	13.8	5.1	61.2	184
Delivery by C-section	23.3	19.3	6.8	4.1	63.3	418
Total	21.3	7.7	4.4	2.0	74.3	11,844
TOTAL						
Antenatal care/ delivery assistance <sup>1</sup>						
Both ANC and DA	24.2	7.0	3.7	2.0	71.6	7,825
ANC only	18.6	6.9	3.4	1.3	77.6	6,665
DA only	33.3	17.7	7.1	7.1	52.7	142
No ANC or DA	22.2	8.2	5.1	2.5	73.3	1,584
Neonatal death	32.4	12.5	12.7	4.3	62.4	249
Delivery by C-section	24.6	14.4	6.0	3.4	64.8	695
Total	21.8	7.2	3.8	1.8	74.1	16,217

Note: Figures in parentheses are based on 25-49 unweighted cases.

<sup>1</sup> Care provided by a doctor, nurse, or midwife.

ANC = Antenatal care

DA = Delivery assistance



## CHAPTER 11

### IMMUNIZATION OF CHILDREN

The Expanded Program of Immunization, launched by the Indonesian Ministry of Health in 1977, recommended that all children receive immunization against six diseases: tuberculosis (BCG), diphtheria, pertussis, tetanus (DPT), polio, and measles. In the sixth Five-Year Development Plan (1993-94 to 1997-98), efforts to reduce childhood morbidity and mortality by improving the immunization coverage among children have been continued, in particular with the National Mass Immunization Campaigns in 1996 and 1997.

Infants brought to health centers or to health posts for postnatal care are provided with a health card on which feeding, growth, and immunization information can be recorded. The type and date of vaccinations are also recorded in a registration book maintained by the field vaccinators. It is important that cards be kept by the mothers, to enable them to monitor their children's growth and to keep a record of immunization schedules. However, not all mothers have kept the cards. Furthermore, not all infants receive postnatal care and, therefore, have never received a health card.

In this survey, immunization information was collected for children born in the five years before the survey. For children with a health card, the interviewer asked to see the card, then copied the vaccination dates onto the questionnaire. If the child had never received a health card or if the mother was unable to show the card to the interviewer, the mother was asked questions about the types of immunizations her children received—i.e., BCG, DPT, polio, and measles vaccines—and the number of doses of DPT and polio vaccines received.

#### 11.1 Health Cards

Table 11.1.1 shows the percentage of children for whom mothers reported they had a health card and whether or not it was seen by the interviewer. Overall, among children age 12-59 months, 84 percent had been given a health card, but only 19 percent had health cards that were actually seen by the interviewer. Sixty-one percent were reported by their mothers to have cards, but these were not seen by the interviewer. The large proportion of children reported to have cards but for whom the mother could not show the card to the interviewer reflects the fact that many cards are kept at the health centers or kept by health cadres or are discarded or lost in the respondent's house.

The percentage of children whose mothers could show their health cards declines with increasing age of the children. The decline with age may reflect either an increase in the use of health cards over time or the fact that the health cards of older children are more likely to have been lost or discarded. There is no difference in health card coverage by the sex of the child; however, the percentage seen by the interviewer is higher for children of low birth order, urban children, and children of educated women. Only 12 percent of children born to mothers with no education were able to show a health card to the survey interviewer, compared with 24 percent of women with some secondary education (Figure 11.1).

Children in Outer Java-Bali I are less likely to have ever had a health card than children in Java-Bali region (Table 11.1.2). The percentage of children who have a health card varies by province, ranging from a low of 69 percent in North Sumatra to close to 100 percent in DI Yogyakarta, while the percentage with cards seen by the IDHS interviewers ranges from 5 percent in Dista Aceh to 39 percent in DI Yogyakarta. Provinces in which health card coverage is relatively high (95 percent or higher) are North Sulawesi, East Nusa Tenggara, and East Kalimantan. However, the percentage of children for whom a health card was issued but was no longer available in the respondent's house is particularly high in DKI Jakarta (9 percent).



**Table 11.1.1 Health cards: background characteristics**

Percent distribution of children age 1-4 years by presence of a health card, according to background characteristics, Indonesia 1997

Background characteristic	Card seen	Card not seen	No longer has card	Never had card	Total	Number of children
<b>Age of child</b>						
12-23 months	30.8	51.5	1.9	15.7	100.0	3,088
24-35 months	21.0	58.6	3.5	16.9	100.0	3,021
36-47 months	15.3	65.3	4.2	15.2	100.0	3,047
48-59 months	9.9	67.7	5.1	17.3	100.0	3,064
<b>Sex of child</b>						
Male	20.0	60.1	3.7	16.1	100.0	6,243
Female	18.5	61.4	3.6	16.4	100.0	5,977
<b>Birth order</b>						
1	23.8	60.2	3.9	12.1	100.0	4,000
2-3	19.8	63.2	3.2	13.7	100.0	4,944
4-6	14.0	59.9	4.2	21.9	100.0	2,505
7+	9.6	51.3	3.5	35.6	100.0	770
<b>Residence</b>						
Urban	24.2	64.5	3.2	8.1	100.0	3,359
Rural	17.4	59.4	3.8	19.3	100.0	8,861
<b>Region/Residence</b>						
Java-Bali	22.1	57.5	4.6	15.7	100.0	6,997
Urban	27.2	62.0	3.7	7.0	100.0	2,269
Rural	19.7	55.4	5.1	19.8	100.0	4,729
Outer Java-Bali I	15.3	63.7	2.8	18.3	100.0	3,581
Urban	17.9	66.8	2.6	12.7	100.0	751
Rural	14.6	62.9	2.9	19.7	100.0	2,830
Outer Java-Bali II	15.9	68.2	1.4	14.5	100.0	1,642
Urban	17.8	75.4	1.5	5.3	100.0	340
Rural	15.5	66.3	1.4	16.9	100.0	1,302
<b>Mother's education</b>						
No education	12.4	47.3	2.3	38.0	100.0	1,139
Some primary	15.1	55.3	4.6	25.0	100.0	3,097
Completed primary	20.3	61.6	3.9	14.2	100.0	3,899
Some secondary+	23.5	67.9	3.1	5.5	100.0	4,084
<b>Total</b>	<b>19.3</b>	<b>60.8</b>	<b>3.7</b>	<b>16.3</b>	<b>100.0</b>	<b>12,220</b>

## 11.2 Immunization Coverage

Table 11.2 presents vaccination coverage rates according to information recorded on health cards (top panel), information from mothers (middle panel), and both sources (bottom panel). The table shows that among children age 12-23 months whose health cards were seen, the percentage fully immunized was 69 percent (see top panel). The highest coverage rates (85 percent or higher) are for BCG, DPT1 and polio1 (Figure 11.2). Comparison with the levels reported in 1994 IDHS indicates that immunization coverage as recorded on health cards does not show any significant difference.

Immunization coverage rates based on mothers' reports are considerably lower than those based on health cards (Table 11.2 middle panel). For example, the percentage completely immunized is 53 percent, 20 percent lower than that recorded on the health card. For children age 12-23 months, the highest coverage

rate of individual vaccines is for polio1 (91 percent), BCG (80 percent), and DPT1 (76 percent). In general, immunization coverage rates based on mothers' reports are higher than those recorded in the 1994 IDHS.

**Table 11.1.2 Health cards: region and province**

Percent distribution of children age 1-4 years by presence of a health card, according to region and province, Indonesia 1997

Region and province	Card seen	Card not seen	No longer has card	Never had card	Total	Number of children
<b>Java-Bali</b>	22.1	57.5	4.6	15.7	100.0	6,997
DKI Jakarta	20.2	64.5	9.1	6.3	100.0	449
West Java	14.7	53.8	5.4	26.1	100.0	2,505
Central Java	22.3	63.5	4.2	10.0	100.0	1,819
DI Yogyakarta	39.3	59.8	0.7	0.3	100.0	147
East Java	29.8	55.2	3.4	11.7	100.0	1,923
Bali	35.1	57.2	2.1	5.5	100.0	154
<b>Outer Java-Bali I</b>	15.3	63.7	2.8	18.3	100.0	3,581
Dista Aceh	4.9	66.8	1.3	27.0	100.0	255
North Sumatra	13.7	52.9	2.7	30.6	100.0	931
West Sumatra	12.1	78.2	1.0	8.7	100.0	278
South Sumatra	18.3	63.7	3.5	14.5	100.0	396
Lampung	25.9	61.9	4.9	7.2	100.0	418
West Nusa Tenggara	9.2	72.4	7.2	11.2	100.0	276
West Kalimantan	24.2	53.7	2.7	19.4	100.0	242
South Kalimantan	11.9	78.0	0.3	9.8	100.0	159
North Sulawesi	19.4	76.3	0.3	4.0	100.0	147
South Sulawesi	13.0	67.6	1.3	18.1	100.0	477
<b>Outer Java-Bali II</b>	15.9	68.2	1.4	14.5	100.0	1,642
Riau	13.3	64.3	1.7	20.6	100.0	263
Jambi	14.1	56.0	0.0	29.9	100.0	181
Bengkulu	17.2	71.3	0.5	11.1	100.0	83
East Nusa Tenggara	14.5	79.6	2.0	3.9	100.0	274
East Timor	7.6	72.3	0.8	19.3	100.0	91
Central Kalimantan	16.4	60.7	1.8	21.1	100.0	119
East Kalimantan	23.3	70.7	1.3	4.7	100.0	160
Central Sulawesi	16.7	70.1	1.2	12.0	100.0	127
Southeast Sulawesi	19.8	69.4	2.3	8.6	100.0	87
Maluku	16.8	60.6	1.8	20.8	100.0	129
Irian Jaya	18.6	71.9	1.3	8.2	100.0	129
<b>Total</b>	19.3	60.8	3.7	16.3	100.0	12,220

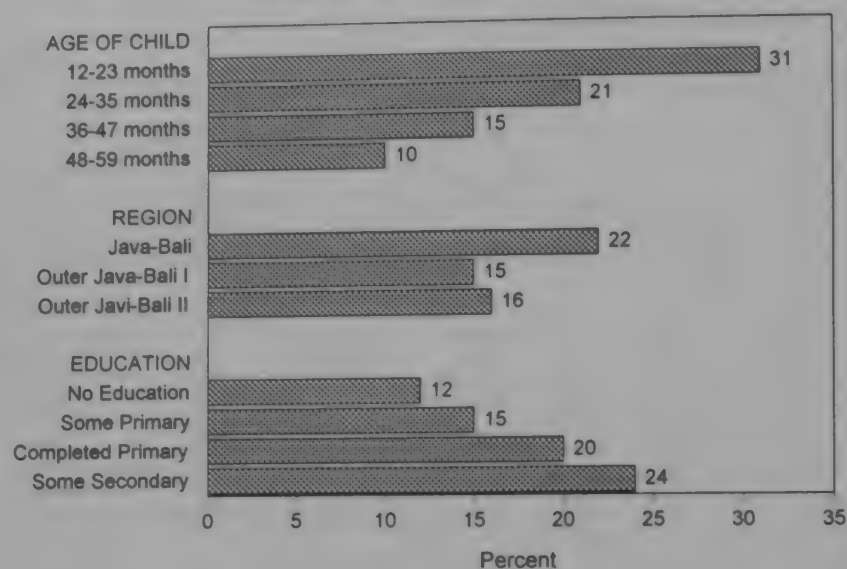
### 11.3 Immunization by Background Characteristics

Table 11.3.1 shows vaccination coverage by background characteristics among children age 12-23 months at the time of the survey. The figures in this table are based both on health cards and mothers' reports. The table also shows health card coverage.

Since girls are slightly more likely than boys to get to the third doses of DPT and polio, as well as measles vaccines, female children are more likely to have received full immunization than male children (56 percent compared with 53 percent).



**Figure 11.1**  
**Health Card Coverage by Child's Age, Region**  
**and Mother's Education**



IDHS97

Except for first births, the percentage of children receiving each vaccine decreases with increasing birth orders and increases with increasing level of mother's education. Thirty-nine percent of children whose mothers have no education have been fully immunized, compared with 69 percent of children whose mothers have some secondary education. Urban children are more likely to be fully vaccinated than rural children (66 percent vs. 50 percent). Despite the relatively high immunization coverage among children in the urban areas, only 37 percent of mothers were able to show the health card.

In 1997, children in Outer Java-Bali II were more likely to be fully immunized than children in other regions (see Table 11.3.2). This pattern is similar to that recorded in the 1994 IDHS but different from the results of the 1991 IDHS, when immunization coverage in Java-Bali was the highest in the country. Within Java-Bali, DI Yogyakarta shows the highest levels of full immunization coverage (87 percent), while West Java has the lowest full immunization coverage (42 percent) in the region. North Sumatra has the lowest coverage of all the provinces (36 percent fully immunized).

The types of immunization received also vary by province. However, for BCG and DPT1 vaccination, Jambi consistently shows the lowest level of immunization coverage, while for polio3 vaccination, eight provinces (West Java, Central Java, Dist. Aceh, North Sumatra, South Sulawesi, East Timor, Maluku, and Central Kalimantan) show immunization coverage of less than 70 percent. Fifteen percent or more of children 12-23 months have never been immunized in South Sulawesi, East Timor, and Maluku.

Health card coverage also varies widely by province, ranging from 9 percent in East Timor to 58 percent in DI Yogyakarta.



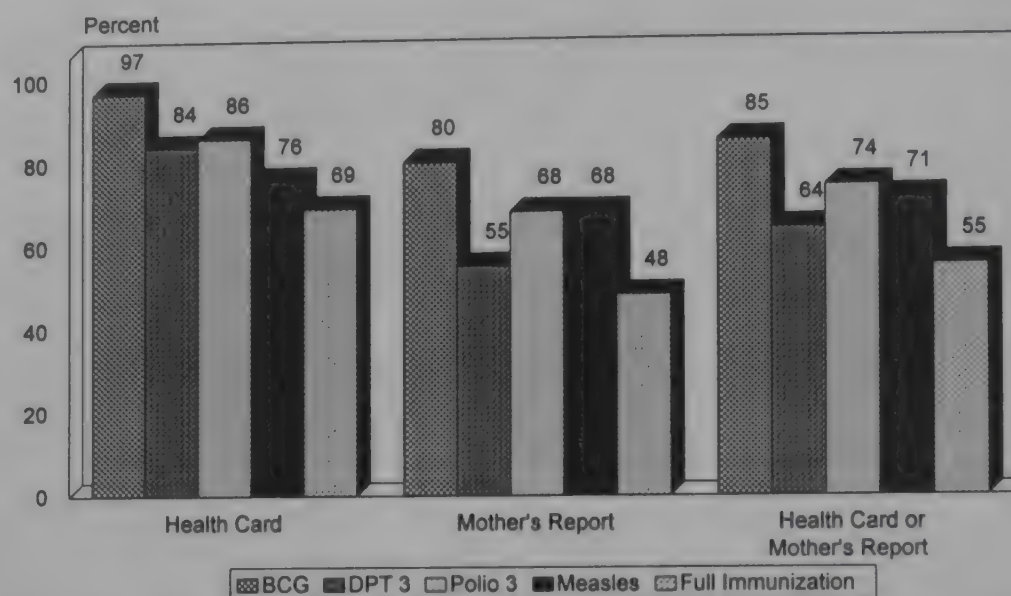
Table 11.2 Vaccinations by source of information

Among children one to four years of age, the percentage who had received specific vaccines at any time before the survey, by source of information (health cards, mothers' reports, or both) and current age of child, Indonesia 1997

Vaccine	Child's age (months)				Total
	12-23	24-35	36-47	48-59	
HEALTH CARDS					
Health card seen	100.0	100.0	100.0	100.0	100.0
BCG	97.1	93.5	94.7	94.9	95.4
DPT 1	97.0	96.7	95.9	96.7	96.6
DPT 2	90.5	90.8	89.7	93.1	90.8
DPT 3	83.8	84.0	85.7	87.1	84.6
Polio 0	21.6	24.0	21.5	17.1	21.6
Polio 1	97.1	98.5	97.9	98.4	97.8
Polio 2	92.7	92.0	92.6	96.7	93.0
Polio 3	86.3	83.8	87.5	88.9	86.2
Measles	76.3	85.8	85.9	82.5	81.6
All <sup>1</sup>	69.4	73.1	80.0	73.4	73.0
None	0.1	0.7	0.7	1.2	0.5
Number of children	954	637	467	304	2,362
MOTHER'S REPORTS					
BCG	79.5	81.6	84.5	85.7	83.1
DPT 1	76.4	78.0	82.2	82.2	79.9
DPT 2	68.3	69.7	75.9	73.6	72.1
DPT 3	55.3	57.6	64.7	61.5	60.1
Polio 0	24.9	28.7	31.0	31.7	29.3
Polio 1	91.0	92.1	92.5	92.2	92.0
Polio 2	86.2	88.0	88.1	87.3	87.5
Polio 3	67.9	74.3	78.3	77.7	74.9
Measles	68.4	72.8	77.0	78.4	74.5
All <sup>1</sup>	48.2	50.8	56.6	55.6	53.1
None	8.1	6.4	6.1	6.2	6.6
Number of children	2,134	2,383	2,580	2,760	9,857
BOTH SOURCES					
Health card seen	30.9	21.1	15.3	9.9	19.3
BCG	84.9	84.0	86.1	86.7	85.4
DPT 1	82.8	81.9	84.3	83.6	83.2
DPT 2	75.1	74.1	78.1	75.6	75.7
DPT 3	64.1	63.2	68.0	64.1	64.9
Polio 0	24.0	27.8	29.5	30.3	27.9
Polio 1	92.9	93.5	93.3	92.9	93.1
Polio 2	88.2	88.8	88.8	88.3	88.5
Polio 3	73.6	76.4	79.8	78.8	77.1
Measles	70.9	75.5	78.4	78.8	75.9
All <sup>1</sup>	54.8	55.5	60.3	57.4	57.0
None	5.6	5.2	5.2	5.7	5.4
Number of children	3,088	3,021	3,047	3,064	12,220

<sup>1</sup> Children who are fully vaccinated (i.e., have received BCG, measles, and three doses each of DPT and polio vaccines).

**Figure 11.2**  
**Immunization Coverage Among Children Age 12-23 Months**



Note: Full immunization refers to children who have received BCG, measles, and three doses each of DPT and polio vaccines.

IDHS97

#### 11.4 Immunizations by First Year of Life

The immunization series should be completed by the end of the first year of life. Therefore, immunization coverage for the first 12 months is evaluated in Table 11.4. The top panel presents immunization coverage based on information recorded on children's health cards, while the bottom panel combines, health card information and mothers' reports. Information from health cards and mothers' reports shows that 46 percent of children age 1 to 4 years have been fully immunized by age one. This rate is slightly higher than the 42 percent reported in 1994.

The patterns of immunization coverage by current age of the child may be interpreted as reflecting time trends in immunization program activities. Based on information from health cards and mothers' reports, the data show increasing coverage among younger children for all types of immunization except measles, which has declined slightly. With reference to children age 12-23 months (born in the period 1996-1997), the percentage fully immunized in the first year of life is 47 percent, compared with 46 percent among children age 48-59 months (born in the period 1989-1990). The proportion of children who have received no vaccinations in the first year of life has been decreasing over time, from 10 percent to 7 percent.

#### 11.5 Distribution of Vitamin A for Children

It is recommended that all children under five years take high-dose vitamin A supplements to prevent vitamin deficiency that may cause xerophthalmia. Vitamin A tablets are distributed at 6-month intervals to children age 12-59 months. The distribution of vitamin A is recorded on the child's health card.

The top panel in Table 11.5 shows the coverage of vitamin A as recorded on health cards by the children's age. Overall, 46 percent of children age 12-59 months for whom a health card was seen have never received high-dose vitamin A. Younger children are less likely to have received vitamin A than older

children. While 56 percent of children 12-23 months have never received vitamin A, the corresponding percentage for children 48-59 months is 30 percent. As vitamin A is recommended to be distributed every 6 months, all children 12-23 months should have received at least one dose of vitamin A. However, more than half of these children have never received any vitamin A. Among children 24-35 months, 44 percent never received the vitamin, and only 15 percent received three or more doses of vitamin A. These figures show that for the majority of children under age five, the distribution of vitamin A has not followed the recommended schedule.

Table 11.3.1 Vaccinations: background characteristics

Percentage of children 12-23 months, who had received specific vaccines by the time of the survey (according to health card or mother's report) and the percentage with a health card by background characteristics, Indonesia 1997

Background characteristic	Percentage of children who received:											Percent with health card	Number of children
	DPT				Polio <sup>1</sup>				Measles	All <sup>2</sup>	None		
	BCG	1	2	3+	0	1	2	3+					
<b>Sex</b>													
Male	84.3	82.7	75.1	62.7	24.5	93.1	88.4	72.2	68.8	53.4	5.1	29.9	1,481
Female	85.5	82.9	75.1	65.4	23.4	92.6	88.0	74.8	72.8	56.0	6.1	31.7	1,607
<b>Birth order</b>													
1	87.1	85.1	76.7	66.8	25.4	93.5	88.3	73.2	74.1	56.6	4.5	35.5	1,057
2-3	88.9	87.0	80.7	70.1	24.0	95.6	91.4	80.5	76.5	62.1	3.6	31.3	1,261
4-6	77.0	77.2	67.4	53.6	21.8	88.0	83.8	65.3	60.5	42.3	9.8	25.7	603
7+	69.9	56.1	51.2	38.8	20.9	86.6	79.6	54.2	44.9	32.4	12.5	16.5	167
<b>Residence</b>													
Urban	92.6	91.5	84.7	75.3	28.5	96.0	92.7	84.9	79.3	65.9	2.3	37.4	927
Rural	81.7	79.1	71.1	59.3	22.0	91.5	86.3	68.8	67.3	50.0	7.0	28.0	2,161
<b>Region/Residence</b>													
Java-Bali	87.4	83.6	75.8	64.6	21.7	93.8	89.0	73.2	71.7	54.9	4.2	35.1	1,734
Urban	93.6	91.8	85.8	77.0	26.1	96.1	92.5	85.7	80.9	67.5	1.8	40.2	640
Rural	83.7	78.9	69.9	57.4	19.2	92.5	86.9	65.9	66.3	47.6	5.6	32.2	1,094
Outer Java-Bali I	80.4	80.4	72.4	61.7	27.6	91.0	85.9	72.1	67.6	52.7	7.8	26.0	957
Urban	88.8	89.4	79.4	66.6	31.4	95.3	92.2	80.6	71.9	56.9	3.5	33.5	209
Rural	78.1	77.9	70.5	60.5	26.7	89.8	84.1	69.7	66.4	51.5	9.0	24.0	742
Outer Java-Bali II	85.2	84.8	79.0	67.7	24.6	93.3	90.6	79.0	75.2	59.3	6.4	23.9	397
Urban	94.4	94.4	89.5	84.4	40.9	96.7	95.0	90.2	85.1	76.9	3.3	25.8	78
Rural	82.9	82.5	76.4	63.6	20.6	92.4	89.6	76.3	72.8	55.0	7.1	23.4	319
<b>Mother's education</b>													
No education	66.7	62.8	57.2	47.1	11.7	79.4	71.5	55.9	52.9	39.3	20.5	20.3	265
Some primary	74.7	72.4	63.9	50.5	21.1	89.8	83.4	62.2	57.1	42.3	8.9	26.6	704
Completed primary	85.8	82.0	73.6	62.1	22.8	92.7	88.5	72.1	70.9	51.9	4.3	30.0	1,030
Some secondary+	95.1	95.1	88.2	79.1	29.7	98.3	95.2	86.7	84.1	69.3	1.1	37.1	1,090
<b>All children</b>	<b>84.9</b>	<b>82.8</b>	<b>75.1</b>	<b>64.1</b>	<b>23.9</b>	<b>92.9</b>	<b>88.2</b>	<b>73.6</b>	<b>70.9</b>	<b>54.8</b>	<b>5.6</b>	<b>30.8</b>	<b>3,088</b>

Note: The DPT coverage rate for children without a written record is assumed to be the same as that for polio vaccine since mothers were specifically asked whether the child had received polio vaccine.

<sup>1</sup>Polio 0 is given at birth

<sup>2</sup>Children who are fully vaccinated (i.e., have received BCG, measles, and three doses each of DPT and polio vaccines)



Table 11.3.2 Vaccinations: region and province

Percentage of children 12-23 months who had received specific vaccines by the time of the survey (according to health card or mother's report) and the percentage with a health card, by region and province, Indonesia 1997

Region and province	Percentage of children who received:											Percent with health card	Number of children
	BCG	DPT			Polio <sup>1</sup>				Measles	All <sup>2</sup>	None		
		1	2	3+	0	1	2	3+					
Java-Bali	87.4	83.6	75.8	64.6	21.7	93.8	89.0	73.2	71.7	54.9	4.2	35.1	1,734
DKI Jakarta	94.3	91.5	86.1	73.3	29.6	98.0	94.1	82.4	77.8	60.7	0.4	31.1	121
West Java	78.8	74.5	62.8	48.5	24.5	95.5	91.8	66.2	61.8	42.4	2.9	22.5	561
Central Java	92.3	86.7	79.3	68.1	17.4	89.8	83.5	68.1	70.6	51.1	5.4	38.2	476
DI Yogyakarta	98.9	98.9	98.9	89.9	24.7	98.9	97.4	92.0	96.3	87.2	1.1	58.0	33
East Java	89.2	87.0	81.4	74.1	19.4	94.1	89.4	81.8	79.4	67.3	5.9	44.3	500
Bali	94.5	95.3	92.7	80.4	37.8	98.2	87.3	80.8	81.5	71.0	1.8	55.5	42
Outer Java-Bali I	80.4	80.4	72.4	61.7	27.6	91.0	85.9	72.1	67.6	52.7	7.8	26.0	957
Dista Aceh	68.4	75.2	70.8	55.3	29.4	93.6	83.3	65.2	61.1	46.1	6.4	10.9	65
North Sumatra	67.9	66.5	56.2	43.7	18.9	85.2	78.5	57.7	53.0	35.9	13.4	22.7	263
West Sumatra	83.2	81.1	68.6	52.0	61.3	91.9	91.9	83.0	66.0	44.3	8.1	14.8	73
South Sumatra	90.0	90.4	79.7	71.8	37.5	97.9	91.3	80.4	78.1	62.3	0.9	32.4	110
Lampung	93.3	92.4	87.2	77.8	30.9	98.4	96.6	83.8	83.1	69.3	0.9	45.1	113
West Nusa Tenggara	91.3	92.2	87.3	79.1	52.1	97.6	93.7	85.7	84.0	69.5	1.6	22.7	69
West Kalimantan	81.1	82.2	77.0	68.8	12.1	90.5	88.3	80.0	66.1	52.9	8.0	37.0	63
South Kalimantan	88.2	89.6	84.6	67.5	30.2	95.4	89.6	76.6	69.5	56.3	3.4	23.6	38
North Sulawesi	95.6	94.1	87.7	80.7	16.4	98.0	93.8	86.2	85.4	73.1	2.0	26.3	40
South Sulawesi	78.5	77.9	71.5	64.8	11.7	81.2	75.8	64.8	65.3	56.2	15.6	21.7	124
Outer Java-Bali II	85.2	84.8	79.0	67.7	24.6	93.3	90.6	79.0	75.2	59.3	6.4	23.9	397
Riau	74.4	73.6	70.2	59.0	36.6	90.3	88.1	74.6	65.7	52.1	9.7	19.1	54
Jambi	65.2	64.6	59.1	50.8	34.3	91.9	88.7	82.3	53.1	41.3	8.1	23.6	51
Bengkulu	88.4	81.8	74.1	64.6	35.2	92.1	89.7	80.0	73.9	55.3	7.0	32.6	20
East Nusa Tenggara	95.4	96.3	87.6	72.5	19.7	99.2	97.3	84.4	85.5	59.3	0.8	15.8	75
East Timor	77.5	76.2	73.6	63.3	12.4	82.5	79.3	58.6	69.0	55.6	16.9	8.5	21
Central Kalimantan	89.6	92.3	84.2	55.9	31.3	96.1	89.6	69.1	83.0	49.0	3.9	28.5	24
East Kalimantan	95.7	92.5	85.3	84.6	61.2	97.0	96.3	91.1	86.4	78.5	2.1	27.9	36
Central Sulawesi	85.6	87.5	80.3	70.5	9.3	92.7	87.2	73.2	72.7	60.9	7.3	31.3	33
Southeast Sulawesi	94.8	94.8	91.2	83.8	0.7	94.5	92.3	84.9	84.4	78.9	4.1	31.9	23
Maluku	83.5	81.3	77.0	64.4	7.7	83.4	81.8	69.7	76.6	60.3	14.9	29.9	32
Irian Jaya	95.0	98.1	94.6	84.0	1.2	98.1	96.3	87.8	84.7	77.6	1.9	29.2	28
Total	84.9	82.8	75.1	64.1	23.9	92.9	88.2	73.6	70.9	54.8	5.6	30.8	3,088

Note: The DPT coverage rate for children without a written record is assumed to be the same as that for polio vaccine since mothers were specifically asked whether the child had received polio vaccine.

<sup>1</sup> Polio 0 is given at birth.

<sup>2</sup> Children who are fully vaccinated (i.e., have received BCG, measles, and three doses each of DPT and polio vaccines).

First-order children and seventh- or higher order children are more likely to have received high-dose vitamin A (59 and 60 percent, respectively) compared with other children (Table 11.5). There is no difference in the distribution of high-dose vitamin A by type of residence; however, the coverage was higher in the Outer Java-Bali regions (62 percent or higher) than in Java-Bali (49 percent).

Children of better educated women are more likely to have received high-dose vitamin A than children of women with less education. The type of assistance during delivery makes little difference in a child's chance of receiving high-dose vitamin A.

Table 11.4 Vaccinations in first year of life

Among children one to four years of age, the percentage who had received specific vaccines during the first year of life, by source of information (health cards or health cards and mothers' reports), and age of child, Indonesia 1997

Vaccine	Child's age (months)				Total
	12-23	24-35	36-47	48-59	
HEALTH CARDS					
Health card seen	100.0	100.0	100.0	100.0	100.0
BCG	92.2	78.5	82.9	83.5	85.6
DPT 1	91.4	85.5	83.9	83.9	87.4
DPT 2	85.3	79.9	78.1	79.9	81.7
DPT 3	75.7	70.1	71.0	69.4	72.5
Polio 0	18.4	19.8	16.5	14.6	17.9
Polio 1	92.0	85.1	84.4	83.5	87.5
Polio 2	85.9	78.2	79.3	77.7	81.5
Polio 3	75.2	66.8	69.3	67.0	70.7
Measles	60.4	63.5	62.4	60.9	61.7
All <sup>1</sup>	53.1	51.4	54.2	53.3	52.9
None	2.8	13.1	13.3	12.4	8.9
Number of children	954	637	467	304	2,362
HEALTH CARDS AND MOTHERS' REPORTS					
Health card seen	30.9	21.1	15.3	9.9	19.3
BCG	83.4	76.9	79.2	82.2	80.5
DPT 1	81.6	75.7	77.3	79.1	78.4
DPT 2	74.3	69.5	71.8	70.1	71.4
DPT 3	61.8	57.6	60.0	56.4	59.0
Polio 0	23.7	26.4	26.4	27.9	26.1
Polio 1	91.2	86.0	84.0	86.1	86.8
Polio 2	86.0	82.6	79.5	78.8	81.7
Polio 3	69.7	69.0	68.1	68.1	68.8
Measles	60.0	60.3	61.0	63.4	61.1
All <sup>1</sup>	46.9	43.9	44.8	46.3	45.5
None	6.9	13.2	15.5	10.4	11.5
Number of children	3,088	3,021	3,047	3,064	12,220

<sup>1</sup> Children who are fully vaccinated (i.e., have received BCG, measles, and three doses each of DPT and polio vaccines).

**Table 11.5 Vitamin A doses for children**

Percent distribution of children age 12-59 months who have health cards, by number of times received Vitamin A, according to selected background characteristics, Indonesia 1997

Background characteristic	Number of times vitamin A recorded on card						Missing	Total	Number of children
	0	1	2	3	4	5+			
<b>Age</b>									
12-23	55.5	26.9	12.1	3.5	0.8	0.6	0.6	100.0	952
24-35	43.8	20.9	20.0	10.6	3.7	0.6	0.4	100.0	636
36-47	37.2	16.2	16.7	12.6	8.5	7.9	0.9	100.0	466
48-59	30.2	18.0	16.1	15.2	3.6	16.5	0.4	100.0	304
<b>Birth order</b>									
1	41.0	23.7	14.3	10.3	4.2	6.2	0.4	100.0	955
2-3	49.4	19.0	16.7	8.0	2.9	3.0	0.9	100.0	982
4-6	47.6	24.3	15.0	7.0	3.7	2.2	0.2	100.0	351
7+	40.3	30.8	22.3	5.7	0.0	0.0	0.6	100.0	74
<b>Residence</b>									
Urban	45.5	21.7	17.4	7.1	3.7	3.5	1.1	100.0	813
Rural	45.4	22.2	14.8	9.5	3.4	4.4	0.3	100.0	1,549
<b>Region/Residence</b>									
Java-Bali	50.8	20.3	14.2	7.5	3.0	3.6	0.5	100.0	1,553
Urban	48.0	21.4	17.5	5.9	3.3	2.5	1.3	100.0	618
Rural	52.7	19.5	12.0	8.6	2.8	4.3	0.1	100.0	935
Outer Java-Bali I	37.7	26.0	17.4	9.5	3.6	5.0	0.7	100.0	548
Urban	42.7	20.8	16.9	8.5	4.0	7.2	0.0	100.0	135
Rural	36.2	27.7	17.6	9.8	3.4	4.3	1.0	100.0	413
Outer Java-Bali II	29.8	24.1	20.8	14.1	5.7	4.9	0.5	100.0	262
Urban	26.8	26.8	16.8	16.1	6.4	5.6	1.5	100.0	60
Rural	30.7	23.3	22.0	13.5	5.5	4.7	0.2	100.0	201
<b>Mother's education</b>									
No education	49.7	26.7	16.0	6.1	1.0	0.2	0.3	100.0	141
Some primary	47.3	23.9	14.2	8.1	3.2	2.8	0.4	100.0	468
Completed primary	50.4	19.3	12.8	10.1	3.5	3.8	0.2	100.0	792
Some secondary +	39.9	22.7	18.7	8.3	3.9	5.5	1.0	100.0	962
<b>Assistance during delivery</b>									
Doctor	42.4	27.8	17.8	6.9	1.2	3.9	0.0	100.0	108
Midwife	46.9	21.3	15.3	7.2	4.1	4.3	0.9	100.0	1,117
Traditional birth attendant	44.2	22.3	15.8	10.4	3.0	4.0	0.3	100.0	1,109
Relative	53.0	17.1	16.5	10.0	3.2	0.0	0.0	100.0	25
Total <sup>1</sup>	45.5	22.0	15.7	8.7	3.5	4.1	0.6	100.0	2,362

<sup>1</sup> Includes 6 children with other assistance during delivery



## CHAPTER 12

### CHILDHOOD DISEASES

#### 12.1 Acute Respiratory Infection

Acute lower respiratory tract infection, primarily pneumonia, is a common cause of morbidity and death among children under five years of age. Pneumonia is characterized by cough with difficult or rapid breathing and chest in-drawing. Severe pneumonia needs hospitalization; otherwise, ambulatory treatment with antibiotics is recommended. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths caused by acute lower respiratory infection. It should be noted that in this survey identification of acute respiratory infection is based on the respondent's perceptions of the respiratory symptoms suffered by the child.

#### Prevalence and Incidence<sup>1</sup> of Acute Respiratory Infection (ARI)

Data from the 1997 IDHS indicate that the prevalence of a cough in the two weeks preceding the survey among children under five is 27 percent, and the incidence is 24 percent. The prevalence of a cough with rapid breathing in the two weeks prior to the survey is 9 percent, and the incidence is 8 percent (Table 12.1.1).

While higher rates of prevalence and incidence are observed among children age 6 to 23 months, little variation is found by other characteristics. Higher order children (seventh or higher) are less likely than low-order children to have a cough. Children born to mothers with no education have slightly lower prevalence and incidence rates of cough than children of mothers who have attended school. While urban children in all regions are more likely than rural children to have a cough, there is little variation in the prevalence of cough with rapid breathing (see Figure 2.1). The prevalence and incidence of cough show negligible differences by region.

Table 12.1.2 shows the prevalence and incidence of cough by province. Nine out of 27 provinces—West Sumatra, South Sumatra, West Nusa Tenggara, North Sulawesi, Riau, Bengkulu, East Nusa Tenggara, Central Kalimantan, and Irian Jaya--have a high prevalence of both cough (30 percent and over) and cough with rapid breathing (10 percent and over). Three provinces, DKI Jakarta, East Java, and East Kalimantan have high prevalence of cough (30 percent and over), and relatively low prevalence of cough with rapid breathing (less than 10 percent). Bali, Dista Aceh, North Sumatra, Jambi, and Central Sulawesi have high prevalence of cough with rapid breathing (10 percent and over), and relatively low prevalence and incidence of cough (less than 30 percent). In general, high prevalence of cough is accompanied by a high incidence.

#### Treatment of Acute Respiratory Infection

Table 12.2.1 shows that seven in ten children with cough and rapid breathing in the two weeks preceding the survey were taken to a health facility or provider, such as hospital, health center, health post (*posyandu*), private clinic, doctor, nurse, or midwife. Twenty-two percent of children received self-treatment (medicine from a pharmacy or drug store), and 8 percent received no treatment. A small percentage of ill children (1 percent) were taken to a traditional healer.

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<sup>1</sup>Prevalence refers to the percentage of children having ARI in the two weeks preceding the survey; incidence refers to the percentage of children who became sick with ARI in the two weeks preceding the survey.

Table 12.1.1 Prevalence and incidence of acute respiratory infection: background characteristics

Among all children under five years of age, the prevalence of cough and cough accompanied by rapid breathing, and the incidence of cough and of cough accompanied by rapid breathing, according to background characteristics, Indonesia 1997

Background characteristic	Prevalence		Incidence		Number of children
	Cough	Cough and rapid breathing	Cough	Cough and rapid breathing	
<b>Age of child</b>					
< 6 months	17.7	6.7	15.7	6.5	1,562
6-11 months	36.9	12.2	30.9	11.3	1,652
12-23 months	31.8	11.2	28.8	10.5	3,088
24-35 months	28.7	8.8	24.9	8.2	3,021
36-47 months	24.5	7.8	22.1	7.0	3,047
48-59 months	22.0	7.3	19.1	6.5	3,064
<b>Sex of child</b>					
Male	27.6	9.4	24.4	8.5	7,927
Female	26.1	8.5	22.9	7.9	7,507
<b>Birth order</b>					
1	29.1	9.3	25.3	8.3	5,085
2-3	26.8	9.2	23.8	8.5	6,282
4-6	25.1	8.1	22.2	7.6	3,141
7+	20.9	8.8	19.2	8.5	926
<b>Residence</b>					
Urban	29.0	7.7	26.4	7.3	4,223
Rural	26.1	9.4	22.7	8.6	11,211
<b>Region/Residence</b>					
Java-Bali	26.6	8.4	23.2	7.6	8,799
Urban	28.5	6.6	26.0	6.4	2,842
Rural	25.7	9.2	21.8	8.2	5,957
Outer Java-Bali I	27.1	9.7	24.3	8.9	4,554
Urban	28.9	10.3	26.1	9.4	950
Rural	26.7	9.5	23.9	8.8	3,604
Outer Java-Bali II	27.7	9.9	24.6	9.3	2,080
Urban	33.2	9.2	29.3	8.7	430
Rural	26.3	10.1	23.4	9.5	1,650
<b>Mother's education</b>					
No education	23.2	7.7	20.2	7.2	1,360
Some primary	26.3	9.8	22.8	9.1	3,835
Completed primary	27.0	9.4	23.6	8.4	4,961
Some secondary +	28.2	8.3	23.3	7.7	5,276
<b>Total</b>	26.9	9.0	23.7	8.2	15,433

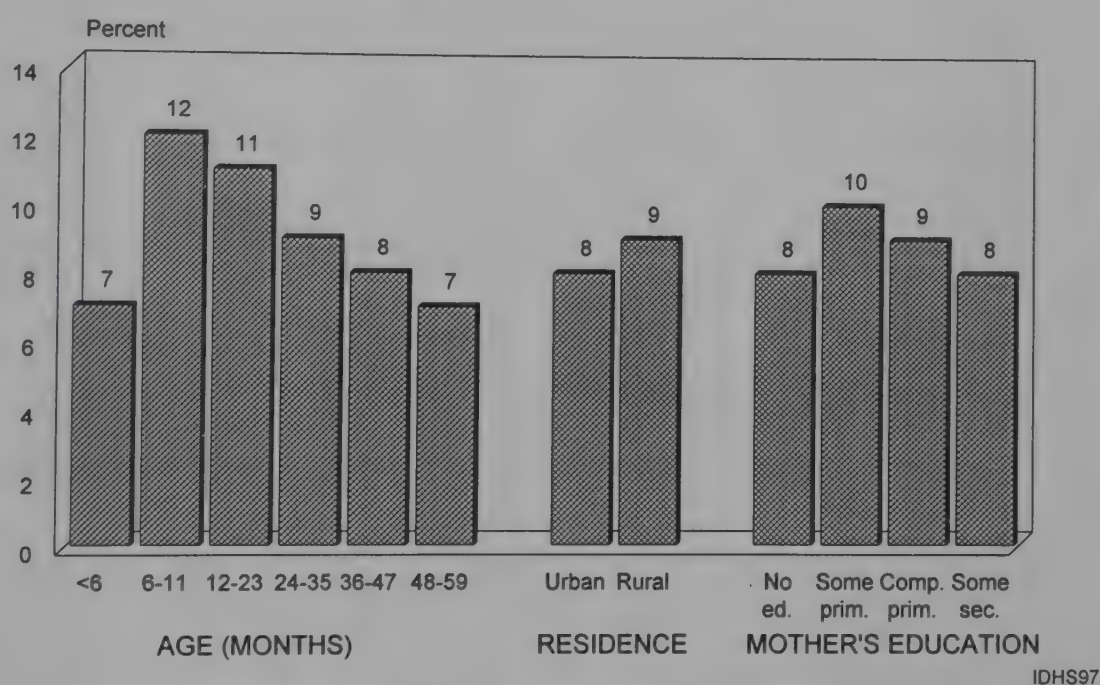
Among infants under 6 months of age with cough and rapid breathing, 63 percent were taken to a health facility, one in five received no treatment, and 2 percent were taken to a traditional healer. There is little variation in the treatment of cough with rapid breathing, according to the sex or birth order of the child.

Urban children are more likely than rural children to be taken to a health facility when they have a cough with rapid breathing. Children of better educated mothers tend to be taken to a health facility for treatment of cough more often than children of mothers with less education, and the former are also less likely to be self-treated.



Children in the Outer Java-Bali I region who have cough with rapid breathing are more likely to be taken to a health facility than children in the Java-Bali and Outer Java-Bali II regions (72 percent, compared with 67 percent and 68 percent). Nineteen percent or more of children with cough and rapid breathing received no treatment in three provinces, South Sulawesi, Bengkulu, and Southeast Sulawesi (Table 12.2.2). Thirty percent or more of children with cough and rapid breathing received self-treatment in West Java, Lampung, South Kalimantan, and Central Sulawesi.

**Figure 12.1**  
**Prevalence of Cough and Rapid Breathing**



## 12.2 Prevalence and Treatment of Fever

Information about the presence of fever in children under five years was recorded in the survey, although the causes of fever were not specified. Various infectious diseases are accompanied by fever. In Indonesia, the most common diseases with fever are malaria, respiratory and intestinal infections, measles, and typhoid.

Table 12.3.1 shows that the overall prevalence of fever (including children who also had cough, rapid breathing, or diarrhea) is 26 percent, and the prevalence of fever only is 6 percent. The prevalence of any fever is highest among infants age 6-11 months (39 percent), while that of fever only is 10 percent. There are negligible differences in the prevalence of any fever by sex of child, birth order, residence, and mother's education.

Since fever may accompany cough and diarrhea, the treatment of any fever may overlap with the treatment of cough and diarrhea. Therefore, in the analysis, treatment of fever refers to children with fever only, without cough or diarrhea.



Fifty-eight percent of children with fever only were taken to a health facility for treatment, 24 percent received self-treatment, and 15 percent received no treatment (Figure 12.2). Infants under 6 months of age with fever are less likely to be treated than older children—38 percent were not treated, compared with 11-16 percent among older children.

Table 12.1.2 Prevalence and incidence of acute respiratory infection: region and province

Among children under five years of age, the prevalence of cough and cough accompanied by rapid breathing, and the incidence of cough and cough accompanied by rapid breathing, according to region and province, Indonesia 1997

Region and province	Prevalence		Incidence		Number of children
	Cough	Cough and rapid breathing	Cough	Cough and rapid breathing	
<b>Java-Bali</b>	26.6	8.4	23.2	7.6	8,799
DKI Jakarta	31.0	8.4	29.3	8.2	555
West Java	26.4	8.9	22.0	8.1	3,146
Central Java	21.4	8.4	16.7	7.5	2,306
DI Yogyakarta	27.7	4.7	26.7	4.7	177
East Java	30.8	7.5	29.2	6.8	2,420
Bali	23.0	12.9	22.0	12.1	196
<b>Outer Java-Bali I</b>	27.1	9.7	24.3	8.9	4,554
Dista Aceh	19.3	9.9	17.3	9.2	336
North Sumatra	26.2	10.7	24.8	10.5	1,194
West Sumatra	32.9	12.3	31.3	11.7	360
South Sumatra	31.5	11.0	27.8	9.4	495
Lampung	24.8	8.6	22.5	7.7	517
West Nusa Tenggara	41.5	14.0	36.1	11.9	344
West Kalimantan	21.7	9.1	20.8	9.1	305
South Kalimantan	21.1	4.2	16.9	4.2	199
North Sulawesi	43.7	11.1	38.1	10.1	183
South Sulawesi	20.7	5.2	16.0	4.4	623
<b>Outer Java-Bali II</b>	27.7	9.9	24.6	9.3	2,080
Riau	33.7	14.7	30.3	13.8	326
Jambi	19.9	9.5	17.9	9.2	235
Bengkulu	34.3	9.5	31.5	8.3	107
East Nusa Tenggara	32.7	10.1	31.1	9.6	343
East Timor	13.7	5.7	10.5	5.6	113
Central Kalimantan	31.7	13.7	29.5	13.5	145
East Kalimantan	31.2	6.3	24.7	5.4	211
Central Sulawesi	22.0	10.8	20.4	10.4	161
Southeast Sulawesi	27.0	9.2	22.0	8.0	111
Maluku	17.6	4.3	15.4	4.3	166
Irian Jaya	31.1	10.5	26.1	9.7	162
<b>Total</b>	26.9	9.0	23.7	8.2	15,433

Treatment of fever varies little by the sex of the children. High-birth-order children with fever are more likely to get no treatment than low-birth-order children (25 percent for seventh or higher order, compared with 14 percent for first children). Children of mothers with no education are the least likely to be treated for fever.

Table 12.2.1 Prevalence and treatment of acute respiratory infection: background characteristics

Among children under five years of age, the percentage who were ill with a cough accompanied by rapid breathing during the two weeks preceding the survey, and the percent distribution of these children by type of treatment received, according to background characteristics, Indonesia 1997

Background characteristic	Percent with cough and rapid breathing	Treatment received by children with cough and rapid breathing				Total	Number of children
		Taken to a health facility or provider <sup>1</sup>	Traditional healer	Self-treatment <sup>2</sup>	No advice/treatment sought		
<b>Age of child</b>							
<6 months	6.7	62.6	1.5	13.9	22.0	100.0	1,562
6-11 months	12.2	74.0	2.4	18.4	5.1	100.0	1,652
12-23 months	11.2	76.0	1.0	18.7	4.2	100.0	3,088
24-35 months	8.8	67.5	0.9	24.5	7.1	100.0	3,021
36-47 months	7.8	65.7	0.2	25.2	8.9	100.0	3,047
48-59 months	7.3	60.3	1.1	30.0	8.6	100.0	3,064
<b>Sex of child</b>							
Male	9.4	69.1	0.6	20.8	9.5	100.0	7,927
Female	8.5	68.4	1.7	24.1	5.8	100.0	7,507
<b>Birth order</b>							
1	9.3	69.1	0.5	21.6	8.9	100.0	5,085
2-3	9.2	70.7	1.2	23.3	4.8	100.0	6,282
4-6	8.1	63.4	1.1	22.4	13.1	100.0	3,141
7+	8.8	70.2	4.3	20.0	5.6	100.0	926
<b>Residence</b>							
Urban	7.7	78.2	0.1	17.0	4.7	100.0	4,223
Rural	9.4	65.9	1.4	24.0	8.7	100.0	11,211
<b>Region/Residence</b>							
Java-Bali	8.3	67.0	0.5	25.0	7.5	100.0	8,799
Urban	6.6	80.0	0.0	14.6	5.5	100.0	2,842
Rural	9.2	62.5	0.7	28.7	8.2	100.0	5,957
Outer Java-Bali I	9.7	72.0	2.0	18.5	7.5	100.0	4,554
Urban	10.3	79.2	0.4	18.3	2.0	100.0	950
Rural	9.5	69.9	2.5	18.6	9.0	100.0	3,604
Outer Java-Bali II	9.9	67.7	1.4	21.3	9.6	100.0	2,080
Urban	9.2	67.3	0.0	25.4	7.3	100.0	430
Rural	10.1	67.8	1.7	20.5	10.0	100.0	1,650
<b>Mother's education</b>							
No education	7.7	60.1	2.5	25.8	11.6	100.0	1,360
Some primary	9.8	59.4	1.9	30.1	8.5	100.0	3,835
Completed primary	9.4	68.8	0.6	24.6	5.8	100.0	4,961
Some secondary+	8.3	78.6	0.7	12.5	8.3	100.0	5,276
<b>Total</b>	<b>9.0</b>	<b>68.8</b>	<b>1.1</b>	<b>22.4</b>	<b>7.7</b>	<b>100.0</b>	<b>15,433</b>

<sup>1</sup> Includes hospital, health center, health post, private clinic, doctor, nurse, midwife, village delivery post, and health cadre

<sup>2</sup> Pharmacy or shop

The prevalence of any fever is high (30 percent or higher) in West Sumatra, West Nusa Tenggara, North Sulawesi, East Nusa Tenggara, Central Kalimantan, and Irian Jaya (Table 12.3.2). The prevalence of fever only is highest in North Sulawesi (11 percent).

Children in the Outer Java-Bali regions are less likely to receive treatment for fever than those in Java-Bali—13 percent of children in Java-Bali received no treatment, compared with 18-19 percent of children in the Outer Java-Bali regions. One in six children in Central Sulawesi and Maluku received

treatment from a traditional healer.

Table 12.2.2 Prevalence and treatment of acute respiratory infection: region and province

Among children under five years of age, the percentage who were ill with a cough accompanied by rapid breathing during the two weeks preceding the survey, and the percent distribution of these children by type of treatment received, according to region and province, Indonesia 1997

Region and province	Percent with cough and rapid breathing	Treatment received by children with cough and rapid breathing				Total	Number of children
		Taken to a health facility or provider <sup>1</sup>	Traditional healer	Self-treatment <sup>2</sup>	No advice/treatment sought		
<b>Java-Bali</b>	8.3	67.0	0.5	25.0	7.5	100.0	8,799
DKI Jakarta	8.4	92.0	0.0	6.2	1.8	100.0	555
West Java	8.9	59.3	0.0	34.1	6.5	100.0	3,146
Central Java	8.4	73.4	0.0	20.6	6.0	100.0	2,306
DI Yogyakarta	4.7	83.9	0.0	16.1	0.0	100.0	177
East Java	7.5	62.8	2.1	23.3	11.8	100.0	2,420
Bali	12.9	82.3	0.0	7.1	10.6	100.0	196
<b>Outer Java-Bali I</b>	9.7	72.0	2.0	18.5	7.5	100.0	4,554
Dista Aceh	9.9	70.1	2.0	14.8	13.1	100.0	336
North Sumatra	10.8	72.1	1.7	20.5	5.8	100.0	1,194
West Sumatra	12.3	79.6	5.4	8.4	6.7	100.0	360
South Sumatra	11.0	81.1	0.0	17.3	1.6	100.0	495
Lampung	8.6	60.7	0.0	31.3	8.0	100.0	517
West Nusa Tenggara	14.0	81.9	2.8	7.6	7.6	100.0	344
West Kalimantan	9.1	72.4	3.1	23.4	1.2	100.0	305
South Kalimantan	4.2	60.1	0.0	35.0	5.0	100.0	199
North Sulawesi	11.0	73.3	0.0	21.2	5.5	100.0	183
South Sulawesi	5.2	51.2	4.8	18.2	25.7	100.0	623
<b>Outer Java-Bali II</b>	9.9	67.7	1.4	21.3	9.5	100.0	2,080
Riau	14.7	59.8	4.3	26.9	9.0	100.0	326
Jambi	9.5	61.0	2.0	25.4	11.6	100.0	235
Bengkulu	9.5	68.4	0.0	10.9	20.7	100.0	107
East Nusa Tenggara	10.1	78.4	0.0	15.3	6.3	100.0	343
East Timor	5.7	94.3	0.0	5.7	0.0	100.0	113
Central Kalimantan	13.7	68.6	0.0	20.8	10.6	100.0	145
East Kalimantan	6.3	69.9	0.0	17.7	12.4	100.0	211
Central Sulawesi	10.8	52.0	1.7	38.7	7.6	100.0	161
Southeast Sulawesi	9.2	63.8	0.0	17.6	18.6	100.0	111
Maluku	4.3	87.7	0.0	8.5	3.8	100.0	166
Irian Jaya	10.6	73.8	0.0	18.2	8.0	100.0	162
<b>Total</b>	9.0	68.8	1.1	22.4	7.7	100.0	15,433

<sup>1</sup> Includes hospital, health center, health post, private clinic, doctor, nurse, midwife, village delivery post, and health cadre

<sup>2</sup> Pharmacy or shop

## 12.3 Diarrheal Disease

Diarrheal diseases continue to be a public health problem in Indonesia. A Diarrhea Control Program has been instituted by improving environmental sanitation to reduce the incidence of diarrhea, and by improving treatment facilities in the hospitals, health centers, and health posts to reduce case fatality rates.



of care. Oral rehydration centers have been established in health centers and health posts. Education about the use of oral rehydration therapy (ORT) for treatment of diarrhea has been introduced through the mass media, especially television.

Table 12.3.1 Prevalence and treatment of fever: background characteristics

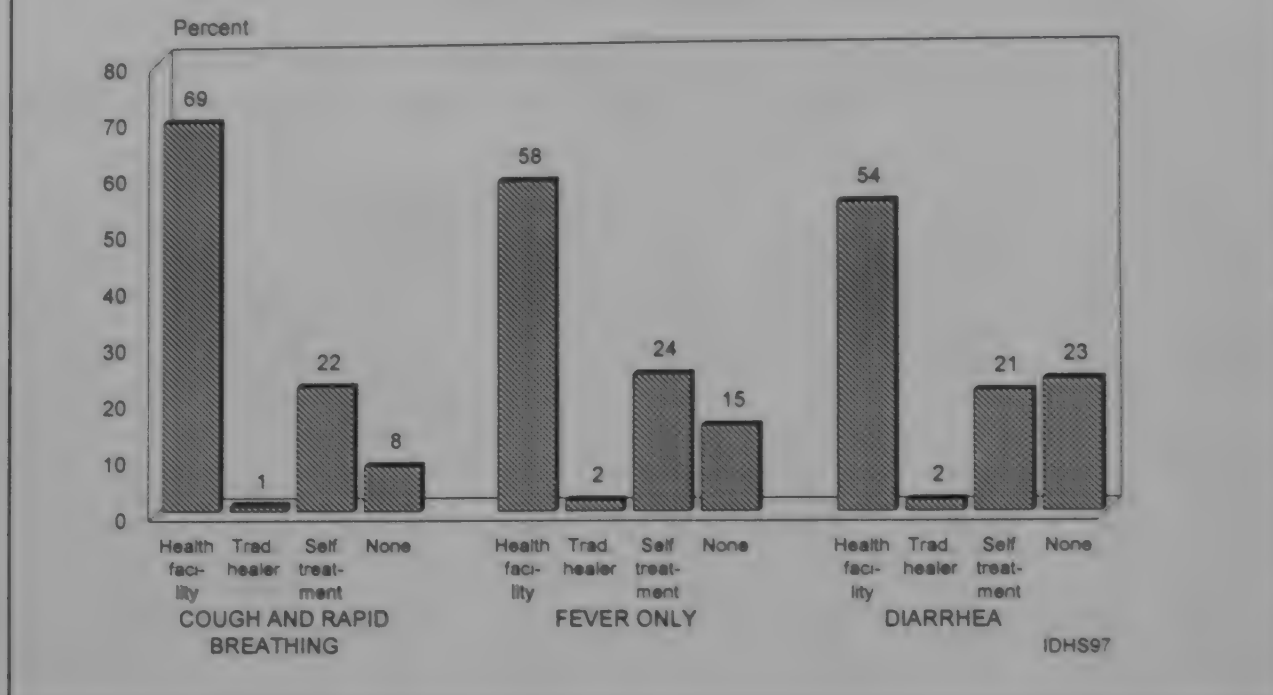
Among children under five years of age, the percentage who were ill with a fever during the two weeks before the survey, and among those ill with fever only the percent distribution by type of treatment received, according to background characteristics, Indonesia 1997

Background characteristic	Percent with fever <sup>1</sup>	Percent with fever only	Treatment received by children with fever only				Total	Number of children
			Taken to a health facility or provider <sup>2</sup>	Traditional healer	Self-treatment <sup>3</sup>	No advice/treatment sought		
<b>Age of child</b>								
<6 months	15.1	5.6	37.8	5.6	18.9	37.8	100.0	1,562
6-11 months	38.9	9.8	69.9	1.1	16.7	12.2	100.0	1,652
12-23 months	33.2	8.0	65.8	2.3	21.0	10.8	100.0	3,088
24-35 months	26.9	5.8	56.9	2.9	24.0	16.2	100.0	3,021
36-47 months	21.8	4.9	54.8	1.6	30.3	13.3	100.0	3,047
48-59 months	19.5	5.4	50.7	0.9	34.2	14.2	100.0	3,064
<b>Sex of child</b>								
Male	26.7	6.1	56.5	2.5	25.4	15.6	100.0	7,927
Female	24.8	6.8	59.6	1.9	23.4	15.1	100.0	7,507
<b>Birth order</b>								
1	26.5	6.6	59.7	3.6	22.3	14.3	100.0	5,085
2-3	25.7	6.4	60.3	1.1	23.4	15.2	100.0	6,282
4-6	25.5	6.1	53.8	2.4	29.5	14.3	100.0	3,141
7+	23.5	6.4	48.3	0.4	26.0	25.4	100.0	926
<b>Residence</b>								
Urban	26.0	6.9	64.1	0.0	24.1	11.8	100.0	4,223
Rural	25.7	6.2	55.6	3.1	24.5	16.8	100.0	11,211
<b>Region/Residence</b>								
Java-Bali	25.5	6.4	62.4	1.3	23.5	12.9	100.0	8,799
Urban	24.9	6.7	65.5	0.0	24.9	9.6	100.0	2,842
Rural	25.8	6.3	60.8	1.9	22.7	14.5	100.0	5,957
Outer Java-Bali I	26.1	6.3	51.0	2.9	27.1	19.0	100.0	4,554
Urban	28.0	7.4	63.5	0.0	22.2	14.4	100.0	950
Rural	25.6	6.0	47.1	3.8	28.6	20.4	100.0	3,604
Outer Java-Bali II	26.3	6.6	55.2	4.4	22.7	17.7	100.0	2,080
Urban	28.9	7.2	57.8	0.0	23.4	18.8	100.0	430
Rural	25.6	6.4	54.3	5.7	22.5	17.5	100.0	1,650
<b>Mother's education</b>								
No education	23.9	5.5	47.9	3.4	17.5	31.2	100.0	1,360
Some primary	27.0	6.5	46.6	0.7	40.3	12.3	100.0	3,835
Completed primary	26.4	6.5	62.8	4.0	19.3	13.9	100.0	4,961
Some secondary+	24.9	6.5	64.5	1.2	18.9	15.4	100.0	5,276
<b>Total</b>	<b>25.8</b>	<b>6.4</b>	<b>58.1</b>	<b>2.2</b>	<b>24.4</b>	<b>15.3</b>	<b>100.0</b>	<b>15,433</b>

<sup>1</sup> Can include cough with short, rapid breathing, and diarrhea

<sup>2</sup> Includes hospital, health center, health post, private clinic, doctor, nurse, midwife, village delivery post, and health cadre

**Figure 12.2**  
**Treatment of Childhood Diseases**



### Prevalence of Diarrhea

In the 1997 IDHS, mothers with children under five years of age were asked if their children had had diarrhea at any time in the two weeks preceding the survey and whether they had diarrhea in the last 24 hours. The survey was conducted between September and December 1997, which was the end of the dry season and the beginning of the rainy season, when the incidence of diarrhea is expected to decline.

Table 12.4.1 shows that 10 percent of children were reported to have had diarrhea in the two weeks preceding the survey, including 2 percent who had diarrhea in the last 24 hours. The prevalence of diarrhea with blood in stools is less than 1 percent.

The prevalence of diarrhea in the two-week period and in the last 24 hours preceding the survey is highest among children age 6-11 months. Diarrhea prevalence varies little by the child's sex, birth order, and residence. Children of mothers who have had no education and children of mothers with some secondary education have slightly lower prevalence of diarrhea than other children. There are some variations in the prevalence of bloody diarrhea.

Table 12.4.1 also presents the prevalence of persistent diarrhea, which is defined as diarrhea in the preceding two weeks that has lasted for at least 14 days and still persists in the 24 hours before the survey. Overall, very few children have persistent diarrhea, and there is little variation by background characteristics.

As shown in Table 12.4.2, the two-week diarrhea prevalence varies slightly by region—12 percent in the Outer Java-Bali II and 10 percent in the Outer Java-Bali I and Java-Bali regions. Central Kalimantan shows the highest prevalence of diarrhea in the two-week period and in the 24 hours preceding the survey (20 and 6 percent, respectively).

Table 12.3.2 Prevalence and treatment of fever: region and province

Among all children under five years of age, the percentage who were ill with a fever during the two weeks before the survey, and among those ill with fever only the percentage receiving/not receiving advice/treatment, according to region and province, Indonesia 1997

Region and province	Percent with fever <sup>1</sup>	Percent with fever only	Treatment received by children with fever only				Total	Number of children
			Taken to a health facility or provider <sup>2</sup>	Traditional healer	Self-treatment <sup>3</sup>	No advice/treatment sought		
<b>Java-Bali</b>	25.5	6.4	62.5	1.3	23.3	12.9	100.0	8,799
DKI Jakarta	25.8	5.2	67.0	0.0	23.9	9.1	100.0	555
West Java	27.4	5.5	65.0	2.2	19.5	13.3	100.0	3,146
Central Java	23.2	7.7	59.6	0.0	27.2	13.1	100.0	2,306
DI Yogyakarta	25.1	7.8	70.4	0.0	22.1	7.5	100.0	177
East Java	25.2	6.6	61.3	2.0	24.5	12.2	100.0	2,420
Bali	24.3	6.6	63.9	0.0	6.9	29.1	100.0	196
<b>Outer Java-Bali I</b>	26.1	6.3	51.0	2.9	27.1	19.0	100.0	4,554
Dista Aceh	21.9	6.6	49.9	0.0	17.4	32.7	100.0	336
North Sumatra	23.8	5.5	59.9	0.0	19.8	20.3	100.0	1,194
West Sumatra	30.1	6.6	53.6	15.0	13.4	18.0	100.0	360
South Sumatra	28.6	6.7	40.8	0.0	32.1	27.1	100.0	495
Lampung	21.3	3.5	63.7	4.7	21.9	9.8	100.0	517
West Nusa Tenggara	40.6	8.1	48.9	12.5	28.1	10.5	100.0	344
West Kalimantan	23.8	5.1	58.0	0.0	30.1	11.9	100.0	305
South Kalimantan	21.7	5.8	28.5	0.0	63.9	7.7	100.0	199
North Sulawesi	44.6	11.1	37.5	2.0	47.0	13.5	100.0	183
South Sulawesi	22.0	7.6	50.8	0.0	27.6	21.5	100.0	623
<b>Outer Java-Bali II</b>	26.3	6.6	55.2	4.4	22.7	17.7	100.0	2,080
Riau	27.4	7.6	30.5	4.3	45.7	19.5	100.0	326
Jambi	18.7	5.6	67.1	2.8	17.7	12.4	100.0	235
Bengkulu	26.2	3.7	48.4	0.0	19.1	32.4	100.0	107
East Nusa Tenggara	32.9	7.1	74.5	0.0	12.7	12.8	100.0	343
East Timor	12.1	2.9	68.8	0.0	9.6	21.7	100.0	113
Central Kalimantan	33.0	6.2	62.1	0.0	27.7	10.2	100.0	145
East Kalimantan	28.4	8.4	61.5	0.0	23.0	15.5	100.0	211
Central Sulawesi	20.7	5.3	36.4	17.3	30.4	15.9	100.0	161
Southeast Sulawesi	26.5	6.0	39.5	10.7	29.5	20.3	100.0	111
Maluku	20.8	7.9	44.7	17.7	6.5	31.1	100.0	166
Irian Jaya	33.8	7.1	71.0	0.0	10.1	18.9	100.0	162
<b>Total</b>	25.8	6.4	58.1	2.2	24.4	15.3	100.0	15,433

<sup>1</sup> Can include cough with short, rapid breathing, and diarrhea

<sup>2</sup> Includes hospital, health center, health post, private clinic, doctor, nurse, midwife, village delivery post, and health cadre

<sup>3</sup> Pharmacy or shop

## Duration and Incidence of Diarrhea

The average duration of a diarrheal episode is calculated from the durations for all children who had diarrhea in the preceding two weeks, excluding those who had diarrhea in the last 24 hours (i.e., terminated episodes only). The results, presented in Tables 12.5.1 and 12.5.2, indicated that the average duration of a diarrheal episode is 3.1 days.



**Table 12.4.1 Prevalence of diarrhea: background characteristics**

Among children under five years of age, the percentage with diarrhea and diarrhea with blood during the two weeks before the survey, and the percentage with diarrhea in the 24 hours before the survey, by background characteristics, Indonesia 1997

Background characteristic	Diarrhea in the preceding 2 weeks <sup>1</sup>		Diarrhea in the last 24 hours	Persistent diarrhea <sup>3</sup>	Number of children
	All diarrhea <sup>2</sup>	Diarrhea with blood			
<b>Age of child</b>					
<6 months	7.5	0.2	1.3	0.0	1,562
6-11 months	17.0	1.1	4.7	0.1	1,652
12-23 months	14.6	1.2	2.8	0.2	3,088
24-35 months	12.5	1.1	2.9	0.2	3,021
36-47 months	6.7	0.6	1.3	0.1	3,047
48-59 months	5.7	0.4	0.7	0.0	3,064
<b>Sex of child</b>					
Male	11.4	0.9	2.7	0.2	7,927
Female	9.4	0.7	1.7	0.1	7,507
<b>Birth order</b>					
1	10.3	0.7	2.1	0.2	5,085
2-3	10.2	0.8	1.9	0.0	6,282
4-6	10.5	0.8	2.5	0.2	3,141
7+	12.0	1.1	3.4	0.0	926
<b>Residence</b>					
Urban	9.1	0.3	1.9	0.0	4,223
Rural	10.9	1.0	2.3	0.2	11,211
<b>Region/Residence</b>					
Java-Bali	10.2	0.8	1.9	0.1	8,799
Urban	9.4	0.4	2.1	0.0	2,842
Rural	10.5	1.0	1.8	0.2	5,957
Outer Java-Bali I	10.3	0.7	2.5	0.1	4,554
Urban	7.8	0.2	1.4	0.0	950
Rural	11.0	0.8	2.7	0.1	3,604
Outer Java-Bali II	11.6	1.2	2.6	0.1	2,080
Urban	10.2	0.4	1.6	0.1	430
Rural	11.9	1.4	2.9	0.1	1,650
<b>Mother's education</b>					
No education	8.9	0.3	1.9	0.1	1,360
Some primary	12.5	1.6	2.9	0.3	3,835
Completed primary	11.1	0.6	2.1	0.1	4,961
Some secondary+	8.6	0.5	1.8	0.0	5,276
<b>Total</b>	<b>10.4</b>	<b>0.8</b>	<b>2.2</b>	<b>0.1</b>	<b>15,433</b>

<sup>1</sup> Includes diarrhea in the last 24 hours

<sup>2</sup> Includes diarrhea with blood

<sup>3</sup> Diarrhea in the last 24 hours and diarrhea in the preceding two weeks that lasted for at least 14 days

There is little difference in the duration of diarrheal episodes by background characteristics. However, the mean duration of diarrhea is slightly longer among children under age 6-12 months and children in the rural areas than that among other children. There are negligible differences in the mean duration of diarrhea by mother's education.

**Table 12.4.2 Prevalence of diarrhea: region and province**

Among children under five years of age, the percentage with diarrhea and diarrhea with blood during the two weeks before the survey, and the percentage with diarrhea in the 24 hours before the survey, by background characteristics, Indonesia 1997

Region and province	Diarrhea in the preceding 2 weeks <sup>1</sup>		Diarrhea in the last 24 hours	Persistent diarrhea <sup>3</sup>	Number of children
	All diarrhea <sup>2</sup>	Diarrhea with blood			
<b>Java-Bali</b>	10.2	0.8	1.9	0.1	8,799
DKI Jakarta	8.3	0.5	1.2	0.1	555
West Java	12.7	0.7	2.2	0.1	3,146
Central Java	8.4	1.0	1.9	0.0	2,306
DI Yogyakarta	(6.7)	(0.2)	(1.8)	(0.0)	177
East Java	9.4	0.7	1.7	0.3	2,420
Bali	8.5	0.7	1.6	0.0	196
<b>Outer Java-Bali I</b>	10.3	0.7	2.5	0.1	4,554
Dista Aceh	(6.0)	(0.7)	(1.0)	(0.2)	336
North Sumatra	8.9	0.4	2.6	0.1	1,194
West Sumatra	13.5	0.8	3.6	0.1	360
South Sumatra	11.0	0.2	1.8	0.0	495
Lampung	(8.4)	0.3	1.9	0.0	517
West Nusa Tenggara	12.5	1.3	2.8	0.0	344
West Kalimantan	15.0	1.2	3.1	0.0	305
South Kalimantan	11.4	1.1	2.1	0.2	199
North Sulawesi	15.6	2.4	7.0	0.0	183
South Sulawesi	9.0	0.3	1.6	0.0	623
<b>Outer Java-Bali II</b>	11.6	1.2	2.6	0.1	2,080
Riau	13.9	0.9	3.8	0.1	326
Jambi	(8.2)	(0.7)	(5.3)	(0.0)	235
Bengkulu	16.5	1.0	2.9	0.0	107
East Nusa Tenggara	13.5	0.4	1.3	0.2	343
East Timor	6.0	0.9	1.4	0.0	113
Central Kalimantan	19.5	6.5	6.2	0.7	145
East Kalimantan	12.2	1.1	2.4	0.0	211
Central Sulawesi	(6.5)	(0.9)	(0.4)	(0.0)	161
Southeast Sulawesi	(11.4)	(1.8)	(1.5)	(0.0)	111
Maluku	*	*	*	*	166
Irian Jaya	13.3	0.7	2.3	0.0	162
<b>Total</b>	10.4	0.8	2.2	0.1	15,433

Note: Figures in parentheses are based on 250-499 births. An asterisk indicates that a figure is based on fewer than 250 births and has been suppressed.

<sup>1</sup> Includes diarrhea in the last 24 hours

<sup>2</sup> Includes diarrhea with blood

<sup>3</sup> Diarrhea in the last 24 hours and diarrhea in the preceding two weeks that lasted for at least 14 days

Table 12.5.1 Duration and incidence of diarrhea: background characteristics

Mean duration of diarrhea (days) among children who had diarrhea in the preceding two weeks but not in the last 24 hours, and the two-week incidence of diarrhea among children under 5, by background characteristics, Indonesia 1997

Background characteristic	Diarrhea in preceding two weeks, but not in last 24 hours		Incidence 1-14 days	Number of children
	Mean duration (days)	Number of children		
<b>Age of child</b>				
<6 months	3.5	97	5.3	1,562
6-11 months	3.7	197	10.2	1,652
12-23 months	3.1	363	10.2	3,088
24-35 months	2.9	288	8.4	3,021
36-47 months	2.8	162	4.8	3,047
48-59 months	2.9	153	4.4	3,064
<b>Sex of child</b>				
Male	3.1	690	7.6	7,927
Female	3.1	570	6.7	7,507
<b>Birth order</b>				
1	3.4	413	7.0	5,085
2-3	2.9	515	7.3	6,282
4-6	3.2	253	7.0	3,141
7+	3.3	79	7.3	926
<b>Residence</b>				
Urban	2.8	304	6.4	4,223
Rural	3.2	956	7.4	11,211
<b>Region/Residence</b>				
Java-Bali	3.1	723	7.2	8,799
Urban	2.7	208	6.5	2,842
Rural	3.2	515	7.5	5,957
Outer Java-Bali I	3.2	354	6.8	4,554
Urban	2.9	60	5.6	950
Rural	3.2	294	7.1	3,604
Outer Java-Bali II	3.2	183	7.7	2,080
Urban	3.1	36	7.5	430
Rural	3.2	147	7.8	1,650
<b>Mother's education</b>				
No education	3.1	94	6.1	1,360
Some primary	3.3	366	8.2	3,835
Completed primary	3.2	440	7.7	4,961
Some secondary+	2.9	360	6.0	5,276
Total	3.1	1,260	7.1	15,433

ORS = Oral rehydration salts



Table 12.5.2 Duration and incidence of diarrhea: region and province

Mean duration of diarrhea (days) among children who had diarrhea in the preceding two weeks but not in the last 24 hours, and the two-week incidence of diarrhea among children under 5, by region and province, Indonesia 1997

Region and province	Diarrhea in preceding two weeks, but not in last 24 hours		Incidence 1-14 days	Number of children
	Mean duration (days)	Number of children		
<b>Java-Bali</b>	3.1	723	7.2	8,799
DKI Jakarta	2.2	39	6.5	555
West Java	3.2	326	9.1	3,146
Central Java	(3.0)	150	5.7	2,306
DI Yogyakarta	*	9	4.4	177
East Java	3.2	186	6.6	2,420
Bali	(2.8)	13	6.1	196
<b>Outer Java-Bali I</b>	3.2	354	6.8	4,554
Dista Aceh	(3.3)	16	4.3	336
North Sumatra	3.6	75	5.3	1,194
West Sumatra	3.0	35	8.6	360
South Sumatra	3.0	46	8.1	495
Lampung	(3.2)	34	5.6	517
West Nusa Tenggara	3.2	34	8.4	344
West Kalimantan	3.5	36	10.1	305
South Kalimantan	(2.4)	18	8.4	199
North Sulawesi	(2.2)	16	7.8	183
South Sulawesi	3.3	45	6.3	623
<b>Outer Java-Bali II</b>	3.2	183	7.7	2,080
Riau	3.1	33	8.8	326
Jambi	*	7	2.6	235
Bengkulu	3.7	14	11.4	107
East Nusa Tenggara	3.3	42	10.5	343
East Timor	(2.8)	5	4.1	113
Central Kalimantan	3.4	19	11.3	145
East Kalimantan	2.6	21	8.9	211
Central Sulawesi	(3.3)	10	5.3	161
Southeast Sulawesi	(3.3)	11	8.5	111
Maluku	*	5	2.8	166
Irian Jaya	(3.4)	17	9.3	162
<b>Total</b>	3.1	1,260	7.1	15,433

Note: Figures in parentheses are based on 250-499 births. An asterisk indicates that a figure is based on fewer than 250 births and has been suppressed.

The two-week diarrheal incidence is defined as the percentage of children having a diarrheal episode that started in the preceding two weeks. It is estimated from the relationship of prevalence to incidence as follows:

$$\begin{aligned}
 I_{1-14} &= P_{2-14} \times 14/(13+D), \text{ incidence in the 14 days preceding the survey} \\
 P_{2-14} &= \text{prevalence in the 2-14 days preceding the survey} \\
 D &= \text{average duration of a diarrheal episode in the 2-14 days preceding the survey}
 \end{aligned}$$

The two-week incidence of diarrhea is 7 percent, which is slightly lower than that recorded in the 1991 IDHS and 1994 IDHS (11 and 8 percent). Diarrhea incidence is higher among children age 6-23 months than among infants under 6 months, perhaps in part because the latter is influenced by the much higher proportion of children with supplementary feeding (Table 13.3). Diarrhea incidence tends to decrease among older children and declined to 4 percent among children 48-59 months.

The variation in diarrhea incidence across residence and region and among subgroups of children was smaller in 1997 than that recorded in the 1994 IDHS.

The mean duration of diarrhea that terminated in the 24 hours preceding the survey was 3.1 days or longer in North Sumatra, West Kalimantan, and Bengkulu (Table 12.5.2). The incidence of diarrhea in the two weeks preceding the survey was highest in Bengkulu, East Nusa Tenggara, and Central Kalimantan (11 days).

### **Knowledge of Diarrhea Care**

The recommended treatment for diarrhea is oral rehydration therapy (ORT), including a solution prepared from ORS packets (prepackaged oral rehydration salts) and increased fluids. In Indonesia ORT is promoted through health education and mass media campaigns. A mother is classified as knowing about ORT if she reported ever having heard about Oralit—the brand of ORS most commonly used—or has seen an ORS packet.

Tables 12.6.1 and 12.6.2 show that the vast majority (94 percent) of mothers have heard about or seen ORS packets. Knowledge of ORT is greater in the urban areas and among more educated mothers. Virtually all women with some secondary education (98 percent) have heard of Oralit or seen ORS packets, compared to only 83 percent of mothers with no education. The percentage of mothers with knowledge of ORS packets in the Outer Java-Bali II regions is slightly lower than in the other two regions (91 percent, compared with 94 percent or higher). While in most provinces virtually all mothers have heard of or seen ORS packets, the proportion in Jambi and Maluku is 87 percent or less (Table 12.6.2).

Information was collected on mother's knowledge of appropriate feeding practices during diarrhea. Table 12.6.1 shows that 66 percent of mothers reported they would give increased fluids, 21 percent would give the same amount of fluids, and 11 percent would give less fluids. Young mothers and those with no education are less likely to give increased fluids to their children during a diarrheal episode.

Mothers are equally divided about feeding their children solid food during diarrhea; one in three said she would give less food to children with diarrhea, one-third would give the same amount of food, and almost one-third would give more food to their children during a diarrheal episode. Urban mothers are more likely than rural mothers to give more food to their children during a diarrheal episode. There is little difference in mothers' knowledge of appropriate feeding practices during diarrhea by age. Mothers with some secondary education are more likely to give more food to their children during diarrhea than mothers with less education.

In DKI Jakarta and DI Yogyakarta, 82-91 percent of mothers would give more fluids to their children during diarrhea, and only 2-3 percent would reduce it (see Table 12.6.2). In West Java, where outbreaks of diarrheal disease occur frequently, 70 percent of mothers would increase the children's fluid intake and 7 percent would reduce it during a diarrheal episode. More than half of mothers in West Kalimantan, Bengkulu, and Central Kalimantan, where the prevalence and incidence of diarrhea are also high, would increase fluid intake, and 8-14 percent would reduce it during diarrhea.



Table 12.6.1 Knowledge of diarrhea care: background characteristics

Percentage of mothers with births in the last five years who know about the use of oral rehydration therapy (ORT) for treatment of diarrhea and the percent distribution by knowledge of appropriate feeding practices during diarrhea, according to background characteristics, Indonesia 1997

Background characteristic	Know about ORT for treatment of diarrhea <sup>1</sup>	Quantities that should be given during diarrhea								Number of mothers
		Liquids				Solid foods				
		Less	Same	More	Don't know/ Missing	Less	Same	More	Don't know/ Missing	
<b>Age of mother</b>										
15-19	90.0	12.3	31.1	51.4	5.2	35.1	35.2	23.2	6.3	682
20-24	94.4	13.1	21.3	62.4	3.3	31.9	35.4	28.9	3.9	3,069
25-29	95.9	10.3	19.3	68.2	2.1	32.4	34.0	30.9	2.7	3,775
30-34	95.3	8.9	17.8	70.3	3.0	32.8	33.1	30.4	3.6	2,827
35+	92.5	9.5	21.5	64.7	4.3	35.1	33.6	26.4	4.9	2,818
<b>Residence</b>										
Urban	97.8	6.3	17.1	74.9	1.7	28.7	35.9	32.7	2.7	3,602
Rural	93.1	12.2	21.8	62.3	3.8	34.7	33.4	27.6	4.3	9,568
<b>Region/Residence</b>										
Java-Bali	95.5	11.1	20.1	66.2	2.6	35.6	34.3	26.8	3.3	7,777
Urban	98.1	6.9	18.4	73.5	1.2	29.9	37.4	30.4	2.2	2,486
Rural	94.2	13.0	20.9	62.8	3.3	38.2	32.9	25.1	3.8	5,291
Outer Java-Bali I	93.7	9.4	22.5	64.7	3.5	31.2	35.9	28.9	4.0	3,707
Urban	97.2	4.6	15.3	77.3	2.6	28.6	34.5	33.3	3.5	765
Rural	92.8	10.6	24.3	61.4	3.7	31.9	36.2	27.8	4.1	2,942
Outer Java-Bali II	91.0	11.1	18.1	65.6	5.2	25.6	29.3	39.4	5.7	1,685
Urban	97.3	5.9	12.1	78.8	3.2	20.3	28.4	47.4	3.9	350
Rural	89.3	12.5	19.6	62.1	5.8	27.0	29.5	37.2	6.2	1,335
<b>Education</b>										
No education	83.3	13.9	23.7	54.6	7.7	38.5	33.4	19.8	8.3	1,150
Some primary	91.2	12.9	25.0	57.9	4.2	37.9	33.4	23.0	5.6	3,216
Completed primary	95.6	11.7	20.3	64.9	3.1	34.4	33.3	28.9	3.5	4,399
Some secondary+	98.4	6.9	16.6	75.1	1.3	26.8	35.6	35.8	1.7	4,406
Total	94.4	10.6	20.5	65.7	3.2	33.1	34.1	29.0	3.8	13,170

ORT = Oral rehydration therapy

<sup>1</sup> Respondent had heard of or seen *Oralit* packets (i.e., packets of oral rehydration salts commonly used to treat diarrhea in Indonesia).

Although 94 percent of mothers have heard about or seen ORS packets, only 68 percent of mothers have ever used ORS packets to treat diarrhea. Young mothers, mothers in the rural areas, and mothers with no education are less likely to have ever used ORS than other mothers (Table 12.7.1).

Mothers in Outer Java-Bali II region are slightly less likely to have ever used ORS packets than mothers in the other two regions (64 percent, compared with 68 percent or higher). The experience in using ORS packets for children with diarrhea varies substantially across provinces, from 85 percent in West Nusa Tenggara to 40 percent or less in East Timor and Maluku (Table 12.7.2).



**Table 12.6.2 Knowledge of diarrhea care: region and province**

Percentage of mothers with births in the last five years who know about the use of oral rehydration therapy (ORT) for treatment of diarrhea and the percent distribution by knowledge of appropriate feeding practices during diarrhea, according to region and province, Indonesia 1997

province, Indonesia 1997

Region and province	Know about ORT for treatment of diarrhea <sup>1</sup>	Quantities that should be given during diarrhea								Number of mothers
		Liquids				Solid foods				
		Less	Same	More	Don't know/ Missing	Less	Same	More	Don't know/ Missing	
Java-Bali	95.5	11.1	20.1	66.2	2.6	35.6	34.3	26.8	3.3	7,777
DKI Jakarta	98.8	3.8	13.6	81.7	0.9	23.6	44.3	30.7	1.5	484
West Java	97.3	6.7	20.3	70.3	2.7	30.3	31.8	33.5	4.4	2,780
Central Java	95.4	15.6	15.7	63.8	4.8	38.7	32.6	23.0	5.7	2,031
DI Yogyakarta	97.2	1.5	7.0	91.2	0.3	21.8	30.4	47.3	0.6	159
East Java	92.4	14.7	26.9	57.1	1.2	43.3	37.2	19.1	0.4	2,156
Bali	94.6	10.8	16.4	72.1	0.7	34.3	34.8	29.9	1.0	168
Outer Java-Bali I	93.7	9.4	22.5	64.7	3.5	31.2	35.9	28.9	4.0	3,707
Dista Aceh	94.6	2.0	24.6	67.9	5.6	20.2	60.8	12.1	6.9	281
North Sumatra	90.3	6.2	27.6	59.8	6.4	31.6	32.7	28.7	7.0	879
West Sumatra	90.5	8.0	17.2	70.1	4.7	30.0	39.7	24.1	6.2	285
South Sumatra	98.6	6.9	16.7	74.1	2.2	29.1	36.3	30.6	4.0	425
Lampung	94.8	8.0	30.6	59.1	2.3	32.3	37.9	27.8	2.0	456
West Nusa Tenggara	98.5	20.5	25.9	53.1	0.5	46.3	30.1	22.8	0.8	304
West Kalimantan	91.4	9.8	19.2	70.5	0.5	28.6	44.8	26.0	0.5	247
South Kalimantan	91.4	8.5	26.5	62.4	2.6	18.2	41.5	37.4	2.9	181
North Sulawesi	96.8	14.6	15.6	68.8	1.0	23.2	27.1	48.6	1.0	154
South Sulawesi	93.9	15.1	12.8	69.2	2.9	37.1	22.8	37.3	2.7	496
Outer Java-Bali II	91.0	11.1	18.1	65.6	5.2	25.6	29.3	39.4	5.7	1,685
Riau	88.7	11.9	21.6	62.1	4.5	30.6	34.4	29.3	5.7	260
Jambi	81.3	10.4	19.0	64.4	6.3	42.2	28.3	22.1	7.3	202
Bengkulu	96.7	7.5	20.8	67.0	4.6	20.6	40.6	34.2	4.6	94
East Nusa Tenggara	91.4	8.8	10.8	70.6	9.7	18.8	12.3	59.4	9.5	276
East Timor	89.8	13.4	14.2	65.0	7.4	24.3	22.4	45.8	7.5	76
Central Kalimantan	90.6	13.5	27.2	54.7	4.5	23.5	39.7	30.8	6.0	121
East Kalimantan	98.6	4.7	11.4	83.1	0.8	10.7	30.4	56.0	2.9	182
Central Sulawesi	90.9	12.7	17.6	63.1	6.6	27.5	22.9	44.1	5.4	137
Southeast Sulawesi	96.6	20.0	27.4	49.2	3.4	29.9	36.8	29.8	3.2	89
Maluku	86.8	17.3	14.2	65.5	3.0	25.0	35.2	37.3	2.6	123
Irian Jaya	96.4	9.7	23.8	63.1	3.4	28.2	37.2	31.0	3.7	126
Total	94.4	10.6	20.5	65.7	3.2	33.1	34.1	29.0	3.8	13,170

ORT = Oral rehydration therapy

<sup>1</sup> Respondent had heard of or seen *Oralit* packets (i.e., packets of oral rehydration salts commonly used to treat diarrhea in Indonesia).

## Diarrhea Treatment

Table 12.8.1 and Figure 12.2 shows that 54 percent of children who had diarrhea in the two weeks preceding the survey were taken to a health facility or provider, 21 percent received self-treatment, and 23 percent were not treated at all.

Treatment of diarrhea varies by the child's age. Infants under 6 months with diarrhea are less likely to be treated, either by being taken to a health facility or by being given self-treatment than older children.

Table 12.7.1 Knowledge and ever use of ORS packets: background characteristics

Percentage of mothers with births in the last five years who know about and have ever used ORS packets, according to background characteristics, Indonesia 1997

Background characteristic	Know about ORS	Ever used ORS packet	Number of mothers
<b>Age of mother</b>			
15-19	90.0	42.4	682
20-24	94.4	63.2	3,069
25-29	95.9	71.2	3,775
30-34	95.3	74.0	2,827
35+	92.5	68.5	2,818
<b>Residence</b>			
Urban	97.8	70.4	3,602
Rural	93.1	66.9	9,568
<b>Region/Residence</b>			
Java-Bali	95.5	68.8	7,777
Urban	98.1	70.5	2,486
Rural	94.2	68.1	5,291
Outer Java-Bali I	93.7	67.9	3,707
Urban	97.2	70.6	765
Rural	92.8	67.2	2,957
Outer Java-Bali II	91.0	63.5	1,685
Urban	97.3	69.9	350
Rural	89.3	61.8	1,335
<b>Education</b>			
No education	83.3	60.0	1,150
Some primary	91.2	65.6	3,216
Completed primary	95.6	69.2	4,399
Some secondary+	98.4	70.3	4,406
Total	94.4	67.9	13,170
ORS = Oral rehydration salts			

While 28 percent of infants under 6 months were taken to a health facility and 6 percent received self-treatment; the corresponding percentages for older children are 51 percent or higher and 12-30 percent, respectively.

First- and seventh-order children who had diarrhea are more likely to be taken to a health facility than other children (60 percent or more, compared with 47 to 52 percent for lower order children). Rural mothers are slightly more likely to take their children with diarrhea to a health facility than urban mothers. On the other hand, urban mothers are more likely to give their children treatment at home during diarrhea than rural mothers.

Treatment of children with diarrhea varies by mother's education. Children of mothers with no education are less likely to be taken to a health facility and much more likely to receive treatment from a traditional healer. For example, among children with diarrhea whose mothers had no education, 40 percent were taken to a health facility for treatment, 15 percent were taken to traditional healer, and 25 percent had

no treatment. Among children of women who had some secondary education, 59 percent were taken to a health facility, 24 percent received self-treatment, and 17 percent received no treatment (Table 12.8.1).

Table 12.7.2 Knowledge and ever use of ORS packets: region and province			
Percentage of mothers with births in the last five years who know about and have ever used ORS packets, according to background characteristics, Indonesia 1997			
Region and province	Know about ORS	Ever used ORS packet	Number of mothers
<b>Java-Bali</b>	95.5	68.8	7,777
DKI Jakarta	98.8	62.6	484
West Java	97.3	71.0	2,780
Central Java	95.4	65.3	2,031
DI Yogyakarta	97.2	75.7	159
East Java	92.4	70.0	2,156
Bali	94.6	70.5	168
<b>Outer Java-Bali I</b>	93.7	67.9	3,707
Dista Aceh	94.6	67.1	281
North Sumatra	90.3	55.6	879
West Sumatra	90.5	66.1	285
South Sumatra	98.6	73.9	425
Lampung	94.8	65.9	456
West Nusa Tenggara	98.5	85.3	304
West Kalimantan	91.4	76.6	247
South Kalimantan	91.4	59.5	181
North Sulawesi	96.8	73.3	154
South Sulawesi	93.9	74.2	496
<b>Outer Java-Bali II</b>	91.0	63.5	1,685
Riau	88.7	68.3	260
Jambi	81.3	52.0	202
Bengkulu	96.7	80.5	94
East Nusa Tenggara	91.4	72.5	276
East Timor	89.8	36.0	76
Central Kalimantan	90.6	63.6	121
East Kalimantan	98.6	67.5	182
Central Sulawesi	90.9	56.6	137
Southeast Sulawesi	96.6	78.3	89
Maluku	86.8	39.9	123
Irian Jaya	96.4	71.1	126
<b>Total</b>	<b>94.4</b>	<b>67.9</b>	<b>13,170</b>
ORS = Oral rehydration salts			

While there is only a slight difference in diarrhea treatment according to region, some provincial variation exists (Table 12.8.2). In certain provinces—West Java, South Kalimantan, Riau, Bengkulu, East Kalimantan, and Central Sulawesi—less than half of children with diarrhea are taken to a health facility; they are more likely to receive self-treatment or no treatment at all.



Table 12.8.1 Source of diarrhea treatment: background characteristics

Among children under five years who had diarrhea in the past two weeks, the percent distribution by source of treatment received, according to background characteristics, Indonesia 1997

Background characteristic	Source of treatment received by children with diarrhea				Total	Children with diarrhea
	Taken to a health facility or provider <sup>1</sup>	Traditional healer	Self-treatment <sup>2</sup>	No advice/treatment sought		
<b>Age of child</b>						
< 6 months	28.0	1.4	6.0	64.6	100.0	118
6-11 months	58.5	1.5	11.8	28.1	100.0	279
12-23 months	60.7	2.3	19.1	17.8	100.0	453
24-35 months	50.6	2.9	30.4	16.1	100.0	376
36-47 months	51.5	0.8	27.9	19.8	100.0	204
48-59 months	59.4	4.0	22.8	13.8	100.0	173
<b>Sex of child</b>						
Male	54.8	2.4	20.0	22.7	100.0	902
Female	53.5	2.0	22.2	22.3	100.0	700
<b>Birth order</b>						
1	60.0	0.2	18.7	21.1	100.0	521
2-3	51.9	3.9	19.0	25.3	100.0	639
4-5	46.8	2.3	28.4	22.5	100.0	332
6+	62.1	2.0	23.2	12.7	100.0	110
<b>Residence</b>						
Urban	51.5	2.2	26.5	19.7	100.0	384
Rural	55.0	2.2	19.5	23.3	100.0	1,219
<b>Region/Residence</b>						
Java-Bali	52.0	2.2	21.5	24.4	100.0	894
Urban	49.4	2.7	26.1	21.8	100.0	267
Rural	53.3	2.0	19.1	25.6	100.0	627
Outer Java-Bali I	56.6	2.3	22.2	18.8	100.0	468
Urban	56.4	0.0	29.8	13.9	100.0	73
Rural	56.6	2.8	20.8	19.8	100.0	395
Outer Java-Bali II	57.5	2.3	17.8	22.4	100.0	241
Urban	55.9	3.2	23.4	17.5	100.0	44
Rural	57.8	2.1	16.6	23.5	100.0	198
<b>Mother's education</b>						
No education	39.7	14.9	20.1	25.3	100.0	122
Some primary	53.2	1.7	21.8	23.4	100.0	479
Completed primary	54.5	1.5	18.1	25.8	100.0	549
Some secondary+	59.2	0.3	23.7	16.8	100.0	454
<b>Total</b>	<b>54.2</b>	<b>2.2</b>	<b>21.0</b>	<b>22.5</b>	<b>100.0</b>	<b>1,603</b>

<sup>1</sup> Includes hospital, health center, health post, private clinic, doctor, nurse, midwife, village delivery post, and health cadre

<sup>2</sup> Pharmacy or shop

Children who have diarrhea may be given a solution (prepared from ORS packets<sup>2</sup>), homemade fluids, other treatments, increased fluids, or a combination of these treatments. Although more than 90

<sup>2</sup> ORS (oral rehydration salts) packets contain a commercially prepared mixture of salts, sugars, and complex carbohydrates that when mixed correctly with water is an effective treatment for diarrhea in children. The brand of ORS most commonly used in Indonesia is *Oralit*.

percent of mothers reported that they had heard of or seen ORS packets, in practice, only 48 percent of children with diarrhea were treated with ORS (Table 12.9.1). Overall, 40 percent of children with diarrhea were given other fluids, 70 percent received either ORS or other fluids, and 78 percent were given some other treatment, including treatments obtained from a pharmacy. A majority of children with diarrhea were given ORS or increased fluids (57 percent). One in 12 children with diarrhea received no treatment at all, i.e., neither given ORS or increased fluids, nor taken to a health facility or given self-treatment.

**Table 12.8.2 Source of diarrhea treatment: region and province**

Among children under five years who had diarrhea in the past two weeks, the percent distribution by source of treatment received, according to region and province, Indonesia 1997

Background characteristic	Source of treatment received by children with diarrhea				Total	Children with diarrhea
	Taken to a health facility or provider <sup>1</sup>	Traditional healer	Self-treatment <sup>2</sup>	No advice/treatment sought		
<b>Java-Bali</b>	52.1	2.2	21.2	24.5	100.0	894
DKI Jakarta	49.9	0.0	30.6	19.5	100.0	46
West Java	46.2	3.1	26.9	23.8	100.0	398
Central Java	50.4	0.0	24.6	25.0	100.0	193
DI Yogyakarta	(65.5)	(0.0)	(8.8)	(25.8)	100.0	12
East Java	62.9	3.2	7.8	26.1	100.0	228
Bali	63.4	0.0	10.6	26.0	100.0	17
<b>Outer Java-Bali I</b>	56.6	2.3	22.2	18.8	100.0	468
Dista Aceh	(64.3)	(0.0)	(13.3)	(22.4)	100.0	20
North Sumatra	49.8	0.0	32.9	17.3	100.0	106
West Sumatra	49.9	3.6	35.1	11.4	100.0	48
South Sumatra	65.5	2.3	19.2	13.0	100.0	54
Lampung	(63.3)	(0.0)	(11.5)	(25.1)	100.0	44
West Nusa Tenggara	67.0	2.6	18.2	12.3	100.0	43
West Kalimantan	60.2	11.1	20.6	8.0	100.0	46
South Kalimantan	47.1	0.0	26.0	26.9	100.0	23
North Sulawesi	51.7	3.2	17.1	28.1	100.0	28
South Sulawesi	53.8	1.6	10.8	33.8	100.0	56
<b>Outer Java-Bali II</b>	57.5	2.3	17.8	22.4	100.0	241
Riau	48.2	3.0	24.0	24.8	100.0	46
Jambi	(51.5)	(4.8)	(7.2)	(36.4)	100.0	19
Bengkulu	45.6	2.3	17.0	35.0	100.0	18
East Nusa Tenggara	75.9	0.0	12.1	12.0	100.0	46
East Timor	72.4	0.0	3.6	24.0	100.0	7
Central Kalimantan	68.4	0.0	22.0	9.6	100.0	28
East Kalimantan	39.4	5.4	35.0	20.2	100.0	26
Central Sulawesi	(48.7)	(5.5)	(14.9)	(31.0)	100.0	11
Southeast Sulawesi	(51.7)	(4.6)	(17.7)	(26.1)	100.0	13
Maluku	*	*	*	*	100.0	7
Irian Jaya	66.5	0.0	9.9	23.7	100.0	22
<b>Total</b>	54.1	2.2	21.2	22.4	100.0	1,603

( ) ORS = Oral rehydration salts

<sup>1</sup> Includes hospital, health center, health post, private clinic, doctor, nurse, midwife, village delivery post, and health cadre

<sup>2</sup> Pharmacy or shop

**Table 12.9.1 Treatment of diarrhea: background characteristics**

Among children under five years who had diarrhea in the past two weeks, the percentage who received oral rehydration therapy (solution prepared from ORS packets, or increased fluids), the percentage who received neither ORS nor increased fluids, and the percentage given other treatments, according to background characteristics, Indonesia 1997

Background characteristic	Oral rehydration therapy (ORT)				Neither ORS nor increased fluids	Other treatment	No treatment	Children with diarrhea
	ORS packets	Other fluids	ORS or other fluids	In-creased fluids				
<b>Age of child</b>								
< 6 months	10.6	21.8	29.1	27.6	53.6	35.4	45.8	118
6-11 months	48.3	40.9	70.2	51.6	17.4	72.0	9.2	279
12-17 months	49.6	46.5	73.9	58.4	11.9	82.2	6.3	453
18-23 months	48.9	36.9	69.3	59.7	10.5	83.9	2.7	376
24-29 months	58.7	41.7	79.9	68.1	8.0	80.2	3.3	204
30-35 months	51.2	41.8	80.4	62.6	11.0	86.2	2.6	173
<b>Sex of child</b>								
Male	46.7	42.4	71.0	55.2	14.9	77.3	8.4	902
Female	48.9	37.8	69.6	59.2	15.3	77.7	7.6	700
<b>Birth order</b>								
1	51.6	46.4	72.6	49.6	15.7	78.9	8.0	521
2-3	47.5	34.9	68.8	62.4	13.5	74.7	6.6	639
4-5	42.6	39.0	67.4	57.7	18.3	77.5	11.6	332
6+	45.8	47.7	77.4	57.1	10.7	87.4	5.9	110
<b>Residence</b>								
Urban	44.2	41.2	64.3	61.7	15.9	80.3	8.4	384
Rural	48.8	40.1	72.3	55.5	14.8	76.7	7.9	1,219
<b>Region/Residence</b>								
Java-Bali	43.2	39.3	66.1	54.7	17.3	75.6	10.1	894
Urban	38.8	39.0	58.0	59.8	18.9	78.2	10.6	267
Rural	45.0	39.4	69.5	52.5	16.6	74.4	9.8	627
Outer Java-Bali I	51.8	42.8	75.3	60.4	12.6	81.2	5.9	468
Urban	58.1	42.9	78.9	69.3	7.3	86.1	3.3	73
Rural	50.6	42.8	74.7	58.7	13.5	80.2	6.4	395
Outer Java-Bali II	56.3	39.7	76.6	58.8	11.8	77.6	4.6	241
Urban	53.6	51.7	78.1	60.5	12.6	82.5	3.7	44
Rural	56.9	37.2	76.2	58.3	11.7	76.5	4.9	198
<b>Mother's education</b>								
No education	45.7	33.6	66.6	40.2	23.4	74.8	16.6	122
Some primary	52.4	37.5	71.9	51.6	14.9	76.6	9.5	479
Completed primary	44.1	35.3	64.5	56.9	17.1	74.2	8.8	549
Some secondary+	47.7	51.4	76.9	67.0	10.4	83.2	3.3	454
<b>Total</b>	<b>47.7</b>	<b>40.4</b>	<b>70.4</b>	<b>57.0</b>	<b>15.1</b>	<b>77.6</b>	<b>8.0</b>	<b>1,603</b>

ORS = Oral rehydration salts

Infants under age 6 months with diarrhea are less likely than older children to be given ORS or increased fluids. In fact, they are less likely to be treated at all, probably because most are still being breastfed. The provision of ORS and increased fluids varies little according to the sex of the child, the birth order, urban/rural residence, and mother's education, although children whose mothers are more educated are more likely to be given increased fluids than children of less educated mothers. Treatment of diarrhea increases with mother's education; children whose mothers have some secondary education are the most likely to be treated.



Table 12.9.2 Treatment of diarrhea: region and province

Among children under five years who had diarrhea in the past two weeks, the percentage who received oral rehydration therapy (solution prepared from ORS packets, or increased fluids), the percentage who received neither ORS nor increased fluids, and the percentage given other treatments, according to region and province, Indonesia 1997

Region and province	Oral rehydration therapy (ORT)				Neither ORS nor increased fluids	Other treatment	No treatment	Children with diarrhea
	ORS packets	Other fluids	ORS or other fluids	In-creased fluids				
<b>Java-Bali</b>	43.2	39.3	66.1	54.7	17.3	75.6	10.1	894
DKI Jakarta	39.8	35.2	61.4	69.6	17.1	80.5	6.7	46
West Java	38.2	26.5	53.6	52.5	23.5	76.2	13.2	398
Central Java	49.5	58.4	87.3	52.1	6.0	75.0	3.0	193
DI Yogyakarta	(45.8)	(41.1)	(71.9)	(75.2)	(10.0)	(74.2)	(3.4)	12
East Java	46.7	45.4	70.0	55.8	16.3	73.9	11.8	228
Bali	48.4	50.3	71.3	62.4	14.6	74.0	8.7	17
<b>Outer Java-Bali I</b>	51.8	42.8	75.3	60.4	12.6	81.2	5.9	468
Dista Aceh	(47.9)	(39.0)	(71.1)	(53.5)	(15.2)	(77.6)	(7.0)	20
North Sumatra	42.6	32.8	66.6	48.5	21.6	82.7	5.4	106
West Sumatra	40.8	55.7	77.6	74.4	7.5	88.6	3.6	48
South Sumatra	59.7	65.8	87.0	69.0	3.0	87.0	1.4	54
Lampung	(56.2)	(39.4)	(71.7)	(48.3)	(19.9)	(74.9)	(17.2)	44
West Nusa Tenggara	70.6	41.9	86.1	63.0	6.1	87.7	2.0	43
West Kalimantan	52.7	42.9	82.4	62.4	9.4	92.0	1.0	46
South Kalimantan	47.8	31.0	56.5	64.3	16.8	73.1	5.3	23
North Sulawesi	59.0	44.3	82.4	63.4	7.1	71.9	7.1	28
South Sulawesi	51.4	36.8	73.1	68.2	10.8	66.2	10.8	56
<b>Outer Java-Bali II</b>	56.3	39.7	77.0	58.8	11.8	77.6	4.6	241
Riau	50.6	43.8	77.1	46.7	12.3	75.2	3.7	46
Jambi	(64.7)	(53.8)	(85.1)	(73.6)	(3.7)	(63.6)	(1.9)	19
Bengkulu	47.9	56.0	72.8	54.7	16.5	65.0	10.7	18
East Nusa Tenggara	68.3	30.7	76.9	66.3	9.5	88.0	0.0	46
East Timor	77.1	34.9	88.2	44.5	3.6	76.0	1.8	7
Central Kalimantan	57.7	43.1	83.1	51.7	11.9	90.4	2.3	28
East Kalimantan	41.0	38.4	65.0	61.3	18.2	79.8	4.5	26
Central Sulawesi	(42.8)	(32.3)	(67.3)	(60.8)	(16.6)	(69.0)	(13.6)	11
Southeast Sulawesi	(42.2)	(23.6)	(60.2)	(58.4)	(23.5)	(73.9)	(15.0)	13
Maluku	*	*	*	*	*	*	*	7
Irian Jaya	70.6	32.7	84.1	61.7	8.3	76.3	8.3	22
<b>Total</b>	<b>47.7</b>	<b>40.4</b>	<b>70.4</b>	<b>57.0</b>	<b>15.1</b>	<b>77.6</b>	<b>8.0</b>	<b>1,603</b>

ORS = Oral rehydration salts

Note: Figures in parentheses are based on 25-49 births. An asterisk indicates that a figure is based on fewer than 25 births and has been suppressed.

Children with diarrhea in Java-Bali are less likely to be given ORS than children in the Outer Java-Bali regions (43 percent, compared with 52 percent or higher). The use of ORS varies substantially across provinces, from 77 percent in East Timor to 38 percent in West Java (Table 12.9.2). Although use of ORS is low (less than 40 percent) in the provinces of DKI Jakarta and West Java, most children with diarrhea received increased fluids and some form of other treatment. The percentage of children with diarrhea who received no treatment ranges from less than 2 percent in South Sumatra, West Kalimantan, and East Nusa Tenggara to 15 percent or higher in Lampung and Southeast Sulawesi.

## Feeding Practices During Diarrhea

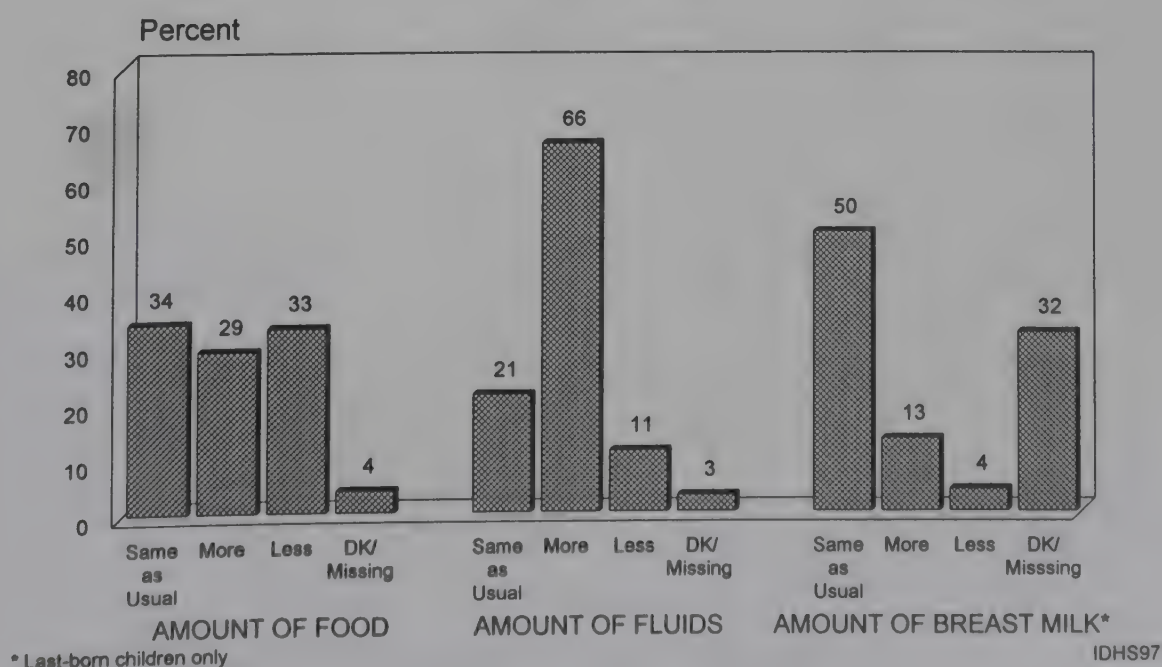
Diarrheal episodes are frequently accompanied by vomiting, which makes feeding difficult because the child frequently refuses food. Table 12.10 and Figure 12.3 show that 20 percent of children with diarrhea received an increased amount of solid food, and 57 percent received increased fluids. For children who were still breastfed for whom information was available, few received less or no breast milk during diarrhea, while three in four received the same amount, and a small proportion were given more breast milk.

Table 12.10 Feeding practices during diarrhea

Percent distribution of children under five who had diarrhea in the preceding two weeks by amount of solid foods given and amount of fluids given, and the percent distribution of last-born children with diarrhea by pattern of breastfeeding, Indonesia 1997

Feeding practice	Total
<b>Amount of solid foods</b>	
Same	29.8
Increased	19.8
Decreased	45.9
Don't know/Missing	4.4
<b>Amount of fluids</b>	
Same	25.9
Increased	57.0
Decreased	14.7
Don't know/Missing	2.7
Total	100.0
Number of children	1,603
<b>Diarrhea breastfeeding pattern</b>	
Unchanged	73.8
Reduced	6.5
Increased	19.4
Stopped	0.3
Total	100.0
Number	1,449

**Figure 12.3**  
**Feeding Practices Among Children Under Five With Diarrhea**







## CHAPTER 13

### INFANT FEEDING

Breastfeeding is of utmost importance to the health and survival of infants. In Indonesia, exclusive breastfeeding is recommended for infants under 4 months of age; the introduction of supplementary food is recommended at age 4 to 6 months.

#### 13.1 Prevalence of Breastfeeding and Supplementation

Table 13.1.1 shows that virtually all children born in the five years preceding the survey were breastfed for at least some time (96 percent). There are negligible differences in the proportion of children ever breastfed by background characteristics.

Table 13.1.1 Initial breastfeeding: background characteristics				
Percentage of children under five who were ever breastfed, and the percentage who started breastfeeding within one hour of birth and one day of birth, by selected background characteristics, Indonesia 1997				
Background characteristic	Percentage ever breastfed	Percentage of children who started breastfeeding:		Number of children
		Within 1 hour of birth	Within 1 day of birth <sup>1</sup>	
<b>Sex of child</b>				
Male	96.3	8.3	52.2	8,387
Female	96.4	8.3	53.1	7,830
<b>Residence</b>				
Urban	95.4	7.5	50.2	4,373
Rural	96.7	8.6	53.5	11,844
<b>Region/Residence</b>				
Java-Bali	96.3	9.5	53.4	9,188
Urban	95.8	7.9	49.9	2,940
Rural	96.5	10.2	55.0	6,247
Outer Java-Bali I	96.4	5.6	50.1	4,821
Urban	94.9	6.4	47.9	984
Rural	96.8	5.5	50.7	3,837
Outer Java-Bali II	96.2	9.2	55.1	2,207
Urban	93.6	7.1	57.3	448
Rural	96.9	9.7	54.4	1,759
<b>Education</b>				
No education	97.1	10.5	60.9	1,462
Some primary	96.8	8.7	51.8	4,067
Completed primary	96.4	8.4	50.9	5,262
Some secondary+	95.7	7.2	52.8	5,425
<b>Assistance at delivery</b>				
Medical professional	95.4	7.2	51.3	7,968
Traditional birth attendant	97.2	9.2	53.2	7,794
Other or none	97.3	11.8	66.5	455
<b>Place of delivery</b>				
Health facility	94.7	7.1	52.9	4,453
At home	96.9	8.7	52.6	11,763
<b>Total</b>	<b>96.3</b>	<b>8.3</b>	<b>52.7</b>	<b>16,217</b>
Note: Includes one child with missing information on place of delivery.				
<sup>1</sup> Includes children who started breastfeeding within one hour of birth.				

**Table 13.1.2 Initial breastfeeding: region and province**

Percentage of children under five who were ever breastfed, and the percentage who started breastfeeding within one hour of birth and one day of birth, by region and province, Indonesia 1997

Region and province	Percentage ever breastfed	Percentage of children who started breastfeeding:		Number of children
		Within 1 hour of birth	Within 1 day of birth <sup>1</sup>	
<b>Java-Bali</b>	96.3	9.5	53.4	9,188
DKI Jakarta	94.3	5.0	53.4	572
West Java	96.4	12.4	39.3	3,351
Central Java	96.4	7.8	52.7	2,385
DI Yogyakarta	97.7	9.9	63.3	181
East Java	96.3	8.2	70.4	2,497
Bali	97.5	9.3	78.4	202
<b>Outer Java-Bali I</b>	96.4	5.6	50.1	4,821
Dista Aceh	96.2	3.4	53.7	354
North Sumatra	95.0	5.0	41.4	1,267
West Sumatra	97.2	6.6	75.9	385
South Sumatra	96.3	3.6	48.6	516
Lampung	97.7	4.7	44.0	544
West Nusa Tenggara	98.0	15.4	77.4	371
West Kalimantan	95.2	4.5	41.1	324
South Kalimantan	96.0	5.2	61.4	214
North Sulawesi	97.3	12.8	52.6	192
South Sulawesi	97.4	3.1	40.8	655
<b>Outer Java-Bali II</b>	96.2	9.2	55.1	2,207
Riau	93.1	5.9	52.2	344
Jambi	95.9	2.5	40.5	247
Bengkulu	96.9	5.3	37.7	117
East Nusa Tenggara	97.5	2.4	65.1	367
East Timor	98.7	13.6	61.4	116
Central Kalimantan	96.4	27.1	71.7	153
East Kalimantan	96.1	9.2	59.8	223
Central Sulawesi	96.5	7.0	34.8	177
Southeast Sulawesi	97.1	4.3	46.5	117
Maluku	97.7	17.6	56.2	173
Irian Jaya	96.1	20.0	71.8	173
<b>Total</b>	<b>96.3</b>	<b>8.3</b>	<b>52.7</b>	<b>16,217</b>

Note: Includes one child with missing information on place of delivery.

<sup>1</sup> Includes children who started breastfeeding within one hour of birth.

In Indonesia, 8 percent of newborns are breastfed within the first hour, and more than half (53 percent) start within the first day. Differences between subgroups of children in the percentage receiving breast milk during the first day are small. Mothers in Java-Bali and Outer Java-Bali II regions are more likely to start giving breast milk to their babies earlier than women in Outer Java-Bali I region. The percentage of children breastfed during the first day of life declines as mother's level of education increases; 61 percent of children whose mothers had no education began breastfeeding within the first day, compared with 53 percent of those whose mothers attended secondary school.

It is interesting to note that the proportion of first-day breastfeeding is lowest among women who were assisted by a medical professional at delivery (51 percent) and highest (67 percent) among women who had no assistance at delivery or were assisted by other people, e.g., friends and relatives. There is no difference in first-day breastfeeding among children born at home or at health facilities (both 53 percent).

The proportion of children receiving breast milk in the first hour of life ranges from less than 3 percent in Jambi and East Nusa Tenggara to 27 percent in Central Kalimantan (Table 13.1.2). The proportion who start to breastfeed in the first day of life varies from 35 percent in Central Sulawesi to 78 percent in Bali.

Mothers who were currently breastfeeding were asked if they had given various types of liquids or solid foods to the child in the last 24 hours (Table 13.2 and Figure 13.1). Children are classified as being exclusively breastfed if they receive breast milk only in the last 24 hours. Full breastfeeding is defined as receiving plain water only in addition to breast milk. Virtually all infants under 7 months were breastfed (92-97 percent). The prevalence of breastfeeding declines to 89 percent at age 12-13 months and to 59 percent at age 22-23 months.

Table 13.2 Breastfeeding status

Percent distribution of living children by breastfeeding status, according to child's age in months, Indonesia 1997

Percentage of living children who are:								Number of living children
Age in months	Not breast- feeding	Exclusively breast- feeding	Breastfeeding and:				Total	
			Plain water only <sup>1</sup>	Other liquids	Other milk <sup>2</sup>	Supple- ments <sup>3</sup>		
<2	3.0	62.4	2.7	4.2	11.0	16.6	100.0	436
2-3	3.9	44.3	2.9	6.0	6.5	36.5	100.0	596
4-5	5.4	23.9	1.9	4.0	2.9	62.0	100.0	530
6-7	7.6	7.9	2.0	2.6	1.9	77.9	100.0	581
8-9	10.5	3.2	0.6	1.1	0.4	84.2	100.0	502
10-11	7.6	2.3	1.0	1.3	1.0	86.7	100.0	569
12-13	10.8	0.6	1.2	1.1	0.0	86.3	100.0	546
14-15	17.5	0.6	0.3	0.7	0.0	81.0	100.0	507
16-17	19.9	0.3	0.1	0.3	0.6	78.9	100.0	581
18-19	25.5	1.4	0.0	0.1	0.0	73.0	100.0	485
20-21	28.4	0.0	0.1	0.0	0.0	71.4	100.0	504
22-23	40.9	0.8	0.8	0.1	0.0	57.4	100.0	465
24-25	51.1	0.0	0.0	0.0	0.0	48.9	100.0	521
26-27	58.0	0.6	0.0	0.0	0.0	41.4	100.0	596
28-29	62.0	0.0	0.0	0.6	0.0	37.5	100.0	521
30-31	69.1	0.8	0.0	0.0	0.0	30.1	100.0	478
32-33	66.1	0.0	0.0	0.0	0.0	33.9	100.0	487
34-35	77.4	0.0	0.0	0.0	0.0	22.6	100.0	417
0-3 months	3.5	52.0	2.8	5.2	8.4	28.1	100.0	1,032
4-5 months	5.4	23.9	1.9	4.0	2.9	62.0	100.0	530
6-9 months	9.0	5.8	1.3	1.9	1.2	80.8	100.0	1,083
10-11 months	7.6	2.3	1.0	1.3	1.0	86.7	100.0	569
12-15 months	14.0	0.6	0.7	0.9	0.0	83.7	100.0	1,054
16-19 months	22.5	0.8	0.1	0.2	0.3	76.2	100.0	1,066
20-23 months	34.4	0.4	0.5	0.0	0.0	64.7	100.0	969
24+ months	63.2	0.2	0.0	0.1	0.0	36.5	100.0	3,021

Note: Breastfeeding status refers to preceding 24 hours

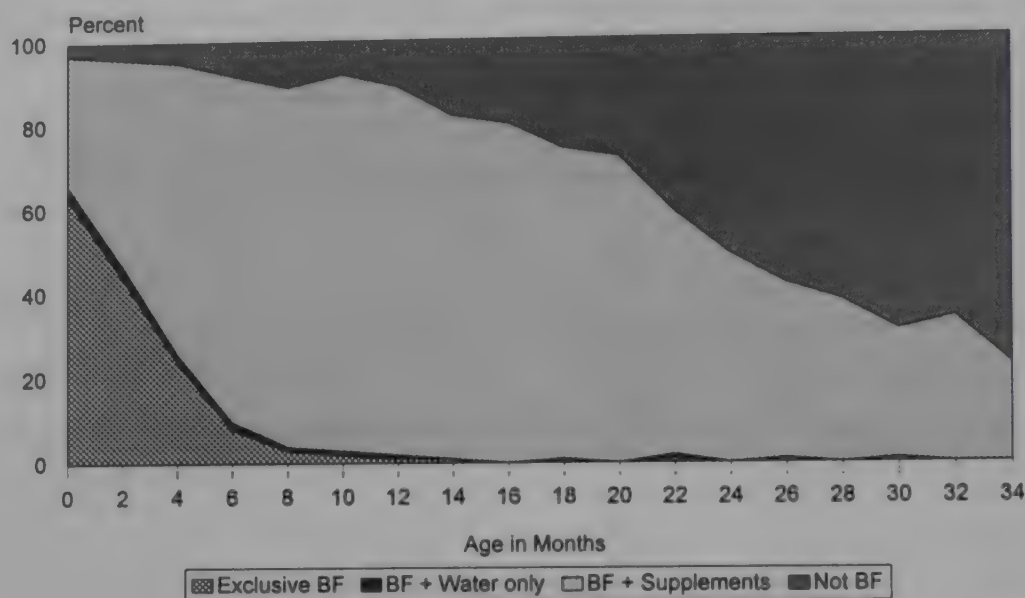
<sup>1</sup> Receive no supplements

<sup>2</sup> May receive other liquids

<sup>3</sup> May receive other liquids or other milk



**Figure 13.1**  
**Distribution of Children by Breastfeeding**  
**(BF) Status, According to Age**



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In general, more than half of infants under 4 months were exclusively breastfed (52 percent). The prevalence of exclusive breastfeeding declines from 62 percent for infants age under 2 months, to 44 percent among those age 2-3 months, to 24 percent among children 4-5 months. A small percentage of infants under 6 months of age were given plain water only in addition to breast milk.

Among currently breastfed children, some were given supplementary liquids such as plain water, water with sugar or honey, fruit juice, tea, starch water, and other types of milk or supplementary foods such as meat, fish, eggs, liver, mashed food, or porridge. Supplementary feeding is introduced very early in infancy; 35 percent of infants under 2 months of age were given supplements consisting of plain water (3 percent), other liquids (4 percent), other milk (11 percent), and solid or mushy foods (17 percent). The proportion of infants receiving supplementary feeding increases rapidly with age. Solid foods are given to 37 percent of infants at age 2-3 months, 62 percent of those age 4-5 months, and 78 percent of infants age 6-7 months.

Table 13.3 presents data on types of food given to breastfeeding children under 3 years of age, the use of a bottle with a nipple in feeding these children, and the use of a pacifier. With regard to the mode of feeding, 10 percent of infants under 2 months were fed using a bottle with a nipple. The proportion increases to 12 percent among infants age 8-9 months.

Beside bottle feeding with a nipple or teat, pacifiers are frequently used to satisfy the infant's sucking demand. Among currently breastfed children, the use of pacifiers decreases with age, from about 8 percent or higher among infants under 5 months, to 5 percent among those 10-11 months, and to less than 4 percent among children 14 months or older (Table 13.3).

**Table 13.3 Type of foods received**

Percent of breastfeeding children under three years who received various types of food in the 24 hours preceding the interview, and the percentage using a bottle with a nipple, and using a pacifier, by child's age in months, Indonesia 1997

Age in months	Type of food received					Using bottle with a nipple	Using pacifier	Number of children
	Breast milk only	Other milk	Other liquid	Meat, fish, eggs, liver	Other			
< 2	64.5	11.6	14.5	0.8	17.1	10.3	8.8	423
2-3	46.1	12.5	23.9	1.9	38.0	11.6	12.2	573
4-5	25.2	12.4	36.9	7.2	65.4	11.1	7.7	501
6-7	8.6	16.2	56.6	25.9	84.3	9.5	4.6	537
8-9	3.6	21.3	60.7	46.7	93.8	12.3	5.4	450
10-11	2.5	19.2	66.9	60.2	93.6	9.3	5.1	525
12-13	0.7	19.4	76.5	73.7	95.3	11.0	4.6	487
14-15	0.7	19.6	78.5	76.1	97.7	9.8	4.1	418
16-17	0.4	25.2	79.4	76.6	98.4	10.7	2.9	465
18-23	1.1	29.0	80.8	82.3	98.0	13.1	2.9	996
24-29	0.5	26.5	84.2	81.6	99.0	5.1	2.4	703
30-35	0.9	19.6	77.7	74.9	98.7	6.6	3.1	407
0-3 months	53.9	12.2	20.0	1.5	29.1	11.2	10.8	996
4-6 months	20.2	12.3	44.0	12.3	71.7	9.9	6.3	794
7-9 months	4.1	21.3	59.6	41.5	91.3	12.0	5.5	693
Total	11.8	20.2	63.2	53.2	83.1	10.1	5.1	6,485

## 13.2 Duration of Breastfeeding

In Indonesia, breastfeeding is not only universal but also relatively long. The median duration of breastfeeding is estimated at 23.9 months (see Table 13.4.1 and Figure 13.2). Children who live in rural areas are breastfed longer than children in urban areas (25 months compared with 22 months). Children in Java-Bali, those born to mothers with less education, and those whose births were assisted by a traditional birth attendant are breastfed longer than other children. The median duration of breastfeeding in Java-Bali is 26 months, compared with 22 months in Outer Java-Bali I and 23 months in Outer Java-Bali II. Children born to mothers with no education are breastfed for almost 7 months longer than those born to mothers with secondary education. Children whose births were assisted by a traditional birth attendant are breastfed for more than 3 months longer than children whose births were assisted by a medical professional, or other person, or no one.

Supplements to breastfeeding are not recommended until the infant reaches 4 months of age. However, the median durations of exclusive and full breastfeeding are 1.7 months and 1.9 months, respectively, which suggests that food supplements are introduced at an earlier age than recommended. The duration of exclusive and full breastfeeding in the Outer Java-Bali regions are longer than in Java-Bali. For example, in Outer Java-Bali II the median duration of full breastfeeding is 2.7 months, compared with 1.7 months in Java-Bali.

Table 13.4.1 Median duration and frequency of breastfeeding: background characteristics

Median durations of any breastfeeding, exclusive breastfeeding, and full breastfeeding among children under three years, and the percentage of children under six months of age who were breastfed six or more times in the 24 hours preceding the interview, by background characteristics, Indonesia 1997

Background characteristic	Median duration in months <sup>1</sup>			Number of children under 3 years of age	Children under 6 months	
	Any breast-feeding	Exclusive breast-feeding	Full breast-feeding <sup>2</sup>		Breastfed 6+ times in preceding 24 hours	Number of children
<b>Sex of child</b>						
Male	23.6	1.6	1.8	4,991	90.3	808
Female	24.1	1.8	2.1	4,777	93.7	754
<b>Residence</b>						
Urban	22.1	1.5	1.8	2,714	89.5	419
Rural	24.7	1.8	2.0	7,054	92.8	1,143
<b>Region/Residence</b>						
Java-Bali	25.6	1.5	1.7	5,522	92.1	869
Urban	22.4	1.7	2.0	1,832	88.2	278
Rural	27.5	1.4	1.4	3,690	93.9	591
Outer Java-Bali I	21.7	1.7	1.9	2,916	91.5	482
Urban	20.6	0.7	0.7	614	95.1	100
Rural	21.9	1.9	2.1	2,302	90.6	382
Outer Java-Bali II	23.0	2.4	2.7	1,330	92.1	210
Urban	20.4	2.2	2.4	269	84.6	41
Rural	23.6	2.4	2.8	1,062	93.8	170
<b>Mother's education</b>						
No education	28.3	1.5	1.6	819	95.7	93
Some primary	26.0	2.4	2.8	2,347	91.7	382
Completed primary	24.3	1.3	1.5	3,231	94.5	532
Some secondary+	21.8	1.7	1.9	3,370	88.9	556
<b>Assistance at delivery</b>						
Medical professional	22.6	1.6	1.8	4,982	91.1	871
Trad. birth attendant	25.9	1.8	2.1	4,503	93.1	642
Other or none	22.4	2.4	3.3	283	90.5	49
<b>Total</b>	<b>23.9</b>	<b>1.7</b>	<b>1.9</b>	<b>9,768</b>	<b>91.9</b>	<b>1,562</b>
<b>Mean</b>	<b>23.9</b>	<b>3.4</b>	<b>3.7</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
<b>Prevalence/Incidence<sup>3</sup></b>	<b>23.6</b>	<b>2.8</b>	<b>3.0</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

NA = Not applicable

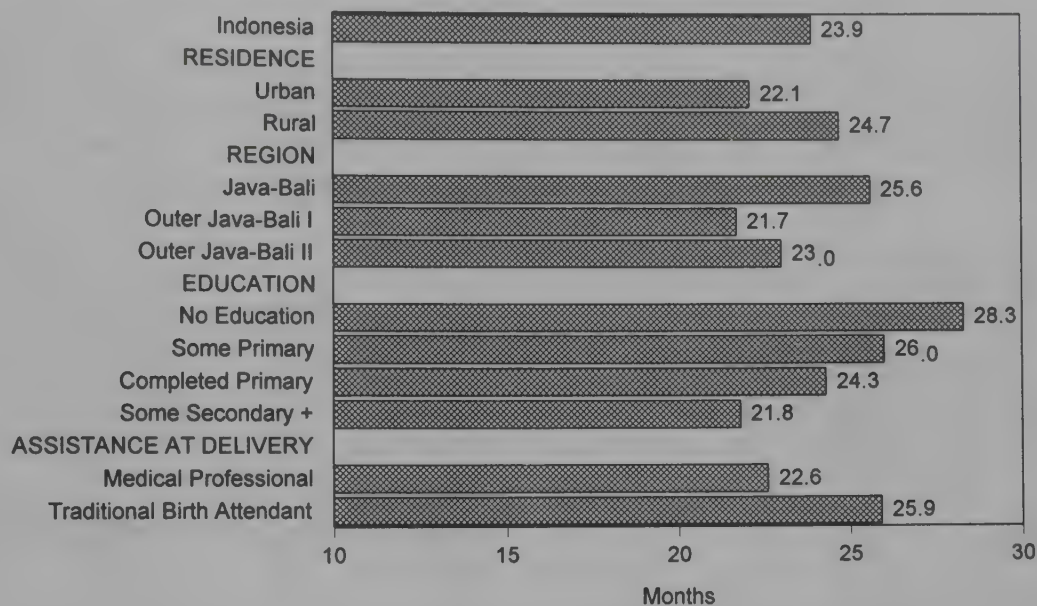
<sup>1</sup> Medians and means are based on current status

<sup>2</sup> Either exclusive breastfeeding or breastfeeding and plain water only

<sup>3</sup> Prevalence-incidence mean



**Figure 13.2**  
**Median Duration of Any Breastfeeding**



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It is recommended that infants under 6 months of age be breastfed frequently. Table 13.4.1 shows that 92 percent of infants under 6 months of age were breastfed six or more times in the 24 hours prior to the survey. Differences according to background characteristics are minimal.

Breastfeeding duration ranges from 18 months in North Sulawesi to 29 months in West Kalimantan (Table 13.4.2). In some provinces (East Java, Dista Aceh, North Sumatra, and West Kalimantan), the median duration of exclusive and full breastfeeding is less than 1 month.

The percentage of infants who were breastfed frequently shows little variation according to region. In the Java-Bali region, infants in DKI Jakarta are less likely than infants in other provinces to be given breast milk frequently (81 percent compared with 89 percent or higher in other provinces). In the Outer Java-Bali regions, West Sumatra and South Sulawesi have the lowest proportions of infants receiving breast milk more than six times during the 24 hours prior to the survey (less than 85 percent).

Table 13.4.2 Median duration and frequency of breastfeeding: region and province

Median durations of any breastfeeding, exclusive breastfeeding, and full breastfeeding among children under three years, and the percentage of children under six months of age who were breastfed six or more times in the 24 hours preceding the interview, by region and province, Indonesia 1997

Region and province	Median duration in months <sup>1</sup>			Number of children under 3 years of age	Children under 6 months	
	Any breast-feeding	Exclusive breast-feeding	Full breast-feeding <sup>2</sup>		Breastfed 6+ times in preceding 24 hours	Number of children
<b>Java-Bali</b>	25.6	1.5	1.7	5,522	92.1	869
DKI Jakarta	20.3	1.0	1.3	354	80.9	56
West Java	26.5	2.0	2.2	2,036	95.0	327
Central Java	U	2.0	2.3	1,402	88.9	236
DI Yogyakarta	25.6	1.8	1.9	105	(95.1)	11
East Java	22.3	0.5	0.5	1,502	93.8	220
Bali	21.4	1.9	1.9	123	93.3	19
<b>Outer Java-Bali I</b>	21.7	1.7	1.9	2,916	91.5	482
Dista Aceh	20.4	0.5	0.6	214	95.1	44
North Sumatra	19.3	0.7	0.7	777	91.7	128
West Sumatra	21.2	1.6	1.9	236	83.7	46
South Sumatra	24.3	2.8	2.8	314	100.0	50
Lampung	21.1	2.3	2.3	320	(96.9)	44
West Nusa Tenggara	21.9	3.2	3.4	214	100.0	30
West Kalimantan	28.8	0.8	0.8	197	87.5	29
South Kalimantan	25.1	2.0	2.4	130	(88.5)	19
North Sulawesi	17.9	1.6	1.7	114	88.2	21
South Sulawesi	23.1	2.4	3.0	398	84.4	71
<b>Outer Java-Bali II</b>	23.0	2.4	2.7	1,330	92.1	210
Riau	22.8	1.2	1.4	208	87.5	35
Jambi	24.1	2.4	2.7	153	95.4	22
Bengkulu	23.1	2.2	2.2	70	(97.5)	12
East Nusa Tenggara	22.4	2.6	2.9	220	96.5	31
East Timor	21.3	1.8	2.9	70	95.3	12
Central Kalimantan	26.4	0.9	0.9	86	(94.6)	12
East Kalimantan	23.7	2.7	2.7	135	87.5	24
Central Sulawesi	28.1	3.6	3.6	108	93.7	18
Southeast Sulawesi	22.8	2.8	3.5	71	88.1	13
Maluku	20.7	3.6	3.6	106	87.3	15
Irian Jaya	22.9	2.3	2.9	103	93.0	18
<b>Total</b>	23.9	1.7	1.9	9,768	91.9	1,562
<b>Mean</b>	23.9	3.4	3.7	NA	NA	NA
<b>Prevalence/Incidence<sup>3</sup></b>	23.6	2.8	3.0	NA	NA	NA

Note: Figures in parentheses are based on 25-49 children.

NA = Not applicable

U = Unknown; less than 50 percent of children under three years have stopped breastfeeding.

<sup>1</sup> Medians and means are based on current status

<sup>2</sup> Either exclusive breastfeeding or breastfeeding and plain water only

<sup>3</sup> Prevalence-incidence mean

## CHAPTER 14

### KNOWLEDGE OF AIDS

In 1986, the Ministry of Health of Indonesia established a coordination board for control of the disease caused by the human immunodeficiency virus (HIV), i.e., acquired immunodeficiency syndrome (AIDS). Since then, various efforts for preventing transmission of the disease have been made, such as public health education through media and nongovernmental organization activities.

In the 1997 Demographic and Health Survey (IDHS), ever-married women age 15-49 years were asked whether they had ever heard of AIDS and, if so, what were their sources of information concerning prevention and treatment of the disease, and what were their personal perceptions about the risk of getting the disease. Currently married women were asked about any changes they had made in sexual behavior to avoid getting AIDS and whether they and their husbands were currently using condoms.

#### 14.1 Source of Information About AIDS

Table 14.1.1 shows the percentage of ever-married women who have heard of AIDS by source of information, according to background characteristics. In this survey, a respondent may report having heard about AIDS from more than one source. Overall, 51 percent of ever-married women have heard of AIDS: 47 percent of all ever-married women received information about AIDS from television; 18 percent received it from radio broadcasts, 15 percent from newspaper or magazines, and 11 percent from friends or relatives. Similar patterns are found for almost all subgroups of women.

The percentage of women who have heard of AIDS varies by age and follows an inverted U-shaped pattern, i.e., low for the youngest age group and women age 30 years and over, and high among women age 20 to 29 years. The percentage of women who have heard of AIDS is higher among currently married women (52 percent) than among those who are widowed (35 percent) or divorced (44 percent).

Urban women are almost twice as likely to have heard about AIDS as women in the rural areas (77 versus 42 percent). This pattern occurs in all regions. Knowledge of AIDS is slightly higher (54 percent) in Outer Java-Bali I than in other regions. Knowledge of AIDS increases with women's level of education, from only 14 percent for women with no education to 88 percent for women with some secondary education (see Figure 14.1).

The percentage of women who have heard about AIDS varies by province, from 25 percent in East Timor and East Nusa Tenggara to 90 percent in DKI Jakarta (Table 14.1.2.). The role of television broadcasting in informing the public about AIDS is notable in DKI Jakarta (87 percent) and North Sulawesi and East Kalimantan (70 percent). Friends and relatives are an important source of information about AIDS for more than 20 percent of women in DKI Jakarta, South Sumatra, and North Sulawesi.

#### 14.2 Knowledge of Ways to Prevent AIDS

One in five women who have heard of AIDS believes there is no way to avoid getting the disease (Table 14.2.1). Those who said that AIDS is preventable could state more than one way to avoid it. Among these women, the most common response is that AIDS is preventable by having sex with only one partner (29 percent) or by avoiding having sex with prostitutes (24 percent). This belief is found among almost all subgroups, and particularly among urban and better educated women. A small percentage of women cited



avoiding having sex with homosexuals, avoiding blood transfusions, and avoiding injections (each about 3 to 6 percent) as ways to avoid getting AIDS. Four percent of women said using condoms during intercourse could prevent AIDS.

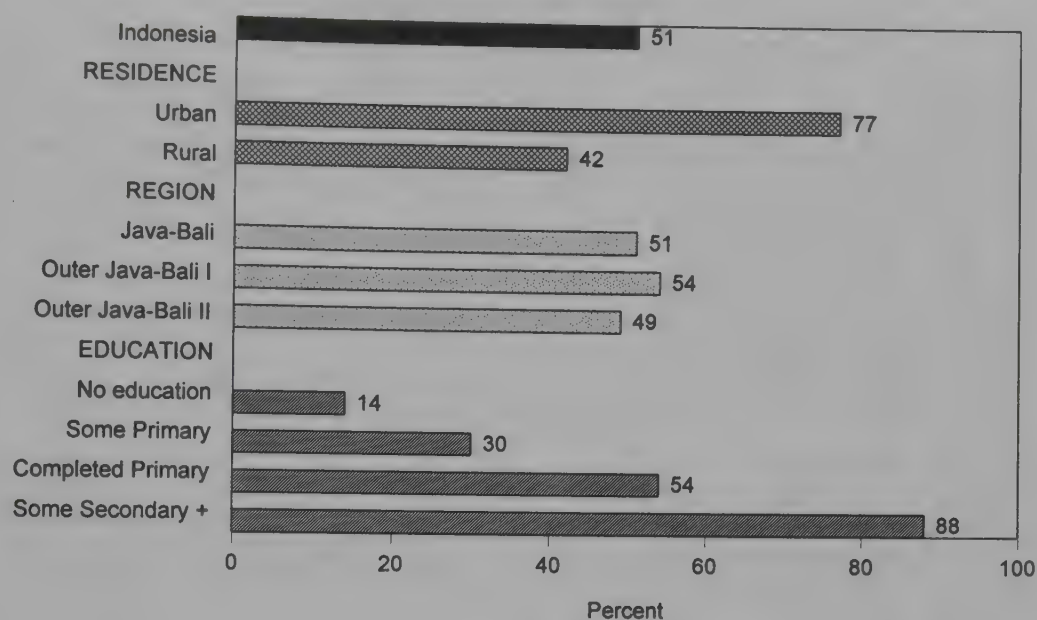
Table 14.1.1 Knowledge of AIDS and sources of AIDS information: background characteristics

Percentage of ever-married women who have heard of AIDS, percentage of ever-married women who received information about AIDS from specific sources, and mean number of sources of information about AIDS, by background characteristics, Indonesia 1997

Background characteristic	Percentage who have heard of AIDS	Sources of AIDS information										Number of women	Mean number of sources
		Radio	TV	News-paper	Pamph-let	Health worker	Mosque/Church	School	Friend/Relative	Com-munity meet-ing	Work-place		
<b>Age</b>													
15-19	52.3	19.9	46.8	12.4	1.4	1.2	0.4	1.2	10.2	1.2	0.8	1,310	1.0
20-24	60.1	23.9	54.8	17.4	1.9	3.4	0.5	0.7	12.9	1.2	1.1	4,061	1.2
25-29	62.3	23.7	57.4	21.7	2.3	4.3	0.3	0.4	13.9	2.2	2.0	5,463	1.3
30-39	50.5	16.6	45.6	15.0	1.4	3.3	0.4	0.3	11.0	2.2	1.7	10,574	1.0
40-49	39.9	13.0	36.1	10.8	1.1	2.0	0.4	0.3	9.6	2.0	1.1	7,402	0.8
<b>Marital status</b>													
Married	52.3	18.5	47.5	15.8	1.6	3.1	0.4	0.4	11.5	2.0	1.5	26,886	1.0
Widowed	44.1	15.2	39.2	12.2	1.1	3.6	0.3	0.4	10.8	1.0	0.7	974	0.8
Divorced	35.4	12.0	32.1	7.5	0.4	1.1	0.4	0.1	9.2	1.7	1.0	951	0.7
<b>Residence</b>													
Urban	76.9	25.8	73.6	32.7	3.2	4.2	0.7	0.6	18.9	3.5	3.2	8,033	1.7
Rural	41.7	15.3	36.5	8.8	0.9	2.6	0.3	0.3	8.6	1.4	0.9	20,777	0.8
<b>Region/Residence</b>													
Java-Bali	50.9	17.7	46.8	16.3	1.5	2.5	0.4	0.4	10.9	2.0	1.7	18,039	1.0
Urban	75.5	25.9	72.3	33.1	3.2	3.7	0.7	0.5	17.9	3.5	3.4	5,722	1.6
Rural	39.6	13.9	35.0	8.6	0.8	2.0	0.2	0.3	7.7	1.3	1.0	12,317	0.7
Outer Java-Bali I	53.9	19.4	48.7	14.1	1.6	3.2	0.3	0.4	13.0	1.8	1.1	7,550	1.0
Urban	80.3	24.3	77.3	31.5	3.1	4.2	0.4	0.7	22.6	2.9	2.4	1,625	1.7
Rural	46.7	18.0	41.0	9.4	1.1	3.0	0.2	0.4	10.3	1.5	0.7	5,925	0.9
Outer Java-Bali II	48.8	18.5	41.8	13.4	1.6	5.6	1.0	0.4	10.7	2.2	1.1	3,221	1.0
Urban	80.3	29.0	75.3	31.9	3.8	8.0	1.3	1.0	18.6	4.0	2.6	686	1.8
Rural	40.3	15.6	32.7	8.4	1.0	5.0	0.9	0.3	8.6	1.7	0.7	2,534	0.8
<b>Education</b>													
No education	13.5	3.6	10.8	0.4	0.0	0.7	0.2	0.0	2.8	0.4	0.2	3,807	0.2
Some primary	30.0	8.4	25.2	2.4	0.3	1.4	0.1	0.1	6.9	0.8	0.4	7,955	0.5
Completed primary	53.7	18.0	47.7	8.4	0.4	2.5	0.2	0.2	10.4	1.6	0.6	8,958	0.9
Some secondary+	88.0	35.0	84.0	43.1	4.8	6.5	1.0	1.2	21.1	4.4	4.2	8,090	2.1
<b>Total</b>	51.4	18.2	46.7	15.4	1.6	3.1	0.4	0.4	11.4	2.0	1.5	28,810	1.0
<b>Ever-married women who have heard of AIDS</b>	100.0	35.4	90.9	30.0	3.0	6.1	0.8	0.8	22.2	3.8	2.9	14,835	2.0

The percentage of women who believe there is no way to avoid AIDS varies little by age group or marital status; however, the percentage is slightly higher among women with no education. Rural women are more likely than urban women to say that there is no way to avoid AIDS (22 percent, compared with 15 percent), and women in the Outer Java-Bali regions are more likely than women in Java-Bali to say that AIDS is unavoidable (27 and 30 percent, compared with 13 percent).

**Figure 14.1**  
**Knowledge of AIDS Among**  
**Ever-Married Women**



IDHS97

Knowledge of ways to prevent AIDS varies by province. The percentage of women who say that AIDS is not preventable varies: 7 percent in DKI Jakarta, 49 percent in East Nusa Tenggara, 51 percent in Jambi, and 78 percent in East Timor (Table 14.2.2). The percentage of women who say that one way of avoiding AIDS is by having only one sexual partner varies from 6 percent in East Timor to 45 percent in DKI Jakarta. The percentage of women who cite avoiding having sex with prostitutes varies from 3 percent in East Timor to over 35 percent in DKI Jakarta and West Sumatra.

### 14.3 Women's Perceptions of the Risk of Getting AIDS

Fifty-six percent of women who have heard of AIDS believe that the disease cannot be cured: 25 percent say that it is curable, and 19 percent do not know whether AIDS is curable (Table 14.3.1). The proportion who say that AIDS cannot be cured varies; it is lowest among women age 15-19 years (49 percent) and women with no education (47 percent) and highest among women in the urban areas, especially in Outer Java-Bali II (65 percent) and among women who have had some secondary education (63 percent).

Seven in ten women believe that they have no chance of contracting AIDS, 8 percent say their chance is small, and 10 percent say that they have a moderate chance. A negligible percentage believe themselves to be at great risk of contracting AIDS. Differences in the perception of AIDS risks between subgroups are small.

Although the percentage of women who believe that AIDS cannot be cured varies slightly by region, there are significant differences by province, ranging from 48 percent in North Sumatra to 82 percent in East Timor (Table 14.3.2). The percentage of women who consider themselves at no risk of getting AIDS varies from 52 percent in DKI Jakarta to 87 percent or higher in North Sulawesi, East Timor, and Southeast Sulawesi.



Table 14.1.2 Knowledge of AIDS and sources of AIDS information: region and province

Percentage of ever-married women who have heard of AIDS, percentage of ever-married women who received information about AIDS from specific sources, and mean number of sources of information about AIDS, by background characteristics, Indonesia 1997

Region and province	Percentage who have heard of AIDS	Sources of AIDS information										Number of women	Mean number of sources
		Radio	TV	News-paper	Pamph-let	Health worker	Mosque/Church	School	Friend/Relative	Com-munity meet-ing	Work-place		
<b>Java-Bali</b>	50.9	17.7	46.8	16.3	1.5	2.5	0.4	0.4	10.9	2.0	1.7	18,039	1.0
DKI Jakarta	89.8	27.7	86.7	47.9	5.7	2.0	0.8	0.1	21.8	3.6	3.9	1,152	2.0
West Java	49.7	13.1	46.5	13.0	1.3	2.2	0.4	0.4	9.7	1.8	2.1	5,691	0.9
Central Java	43.5	20.4	40.3	13.5	1.8	2.9	0.6	0.3	7.0	1.2	1.3	4,634	0.9
DI Yogyakarta	67.5	45.9	61.3	35.8	2.6	7.4	0.8	1.1	17.7	9.4	3.4	439	1.9
East Java	48.2	15.5	42.4	14.4	0.7	2.4	0.1	0.5	12.2	1.9	1.0	5,681	0.9
Bali	59.8	21.8	56.4	12.6	1.0	1.0	0.2	0.4	15.0	2.2	3.0	442	1.1
<b>Outer Java-Bali I</b>	54.0	19.4	48.9	14.2	1.6	3.2	0.3	0.4	13.0	1.8	1.1	7,550	1.0
Dista Aceh	40.9	7.8	37.3	8.0	1.7	0.9	0.1	0.4	10.0	0.7	0.7	570	0.7
North Sumatra	58.9	8.9	55.8	15.4	0.7	1.7	0.3	0.2	13.4	1.2	0.6	1,687	1.0
West Sumatra	52.8	19.4	47.9	23.5	2.3	5.3	0.3	0.3	11.8	2.8	1.8	543	1.2
South Sumatra	66.9	34.5	63.2	24.1	3.6	4.5	0.3	0.4	20.6	2.9	1.9	942	1.6
Lampung	62.5	30.4	48.7	6.4	0.7	2.6	0.0	0.1	13.7	1.6	0.7	913	1.0
West Nusa Tenggara	33.2	15.8	29.9	8.2	1.5	4.6	0.4	0.4	7.6	1.9	0.5	595	0.7
West Kalimantan	46.0	16.7	43.0	12.6	1.0	2.8	0.5	0.2	8.0	1.0	1.3	479	0.9
South Kalimantan	58.0	14.7	55.2	13.2	1.4	1.9	0.0	0.3	6.8	1.4	0.7	433	1.0
North Sulawesi	76.3	33.9	70.0	18.3	1.6	6.8	0.3	1.0	21.5	2.8	1.4	340	1.6
South Sulawesi	41.2	20.0	35.7	12.1	1.8	4.2	0.5	1.2	12.3	2.2	1.7	1,049	0.9
<b>Outer Java-Bali II</b>	48.8	18.5	41.8	13.4	1.6	5.6	1.0	0.4	10.7	2.2	1.1	3,221	1.0
Riau	60.7	27.9	54.1	20.4	1.4	4.3	0.5	0.7	12.4	3.6	0.6	477	1.3
Jambi	44.6	14.3	40.9	8.1	0.3	1.9	0.0	0.3	7.5	2.5	0.4	416	0.8
Bengkulu	53.6	23.0	49.1	14.7	2.4	5.6	0.3	0.4	15.8	2.4	1.0	192	1.1
East Nusa Tenggara	24.6	12.3	16.1	8.4	0.8	8.1	1.4	0.5	3.0	0.5	0.5	489	0.5
East Timor	24.7	11.9	14.3	6.6	1.1	9.2	7.3	0.0	3.3	1.8	0.3	120	0.6
Central Kalimantan	44.1	12.6	39.2	7.4	1.9	4.0	0.7	0.8	12.8	2.3	2.0	238	0.8
East Kalimantan	75.6	16.6	69.6	24.4	1.2	4.6	1.0	0.5	18.3	2.8	1.9	363	1.4
Central Sulawesi	51.4	17.6	47.1	9.3	1.6	5.5	0.6	0.0	7.8	1.2	1.2	270	0.9
Southeast Sulawesi	44.6	21.9	38.7	12.7	1.5	3.5	0.1	0.0	10.3	1.8	1.1	178	0.9
Maluku	41.4	11.4	31.4	11.2	3.8	4.8	0.4	0.7	12.9	1.6	1.9	235	0.8
Irian Jaya	62.0	33.0	46.9	18.6	4.2	13.0	2.0	0.4	16.4	3.7	2.1	242	1.4
<b>Total</b>	51.4	18.2	46.7	15.4	1.6	3.1	0.4	0.4	11.4	2.0	1.5	28,810	1.0
<b>Ever-married women who have heard of AIDS</b>	100.0	35.4	90.9	30.0	3.0	6.0	0.8	0.8	22.2	3.8	2.9	14,835	2.0

## 14.4 AIDS Prevention Behavior

Currently married women who had heard of AIDS were asked if they had changed their sexual behavior to avoid getting AIDS (Table 14.4.1). Virtually all of these women (94 percent) reported that they had not changed their sexual behavior after hearing about the disease. There is little variation by background characteristics or by province. Women in DKI Jakarta are the most likely to change their sexual behavior (Table 14.4.2).



Table 14.2.1 Knowledge of ways to avoid AIDS: background characteristics

Among ever-married women who have heard of AIDS, percentage who know of specific ways to avoid AIDS and percentage with misinformation, by background characteristics, Indonesia 1997

Background characteristic	Ways to avoid AIDS												Percentage with any misinformation <sup>1</sup>	Number of women
	No way to avoid AIDS	Abstain from sex	Use condoms	Have only one sexual partner	Avoid sex with prostitutes	Avoid sex with homosexuals	Avoid transfusions	Avoid injections	Avoid kissing	Avoid mosquito bites	Other	Don't know any way		
<b>Age</b>														
15-19	16.2	0.1	0.6	22.5	17.9	1.0	1.8	4.3	0.4	0.6	1.5	7.4	2.4	685
20-24	18.9	0.6	2.8	29.7	24.3	2.2	3.2	4.9	0.4	0.1	3.1	4.9	3.6	2,440
25-29	19.6	0.3	4.7	30.9	23.3	3.7	5.2	7.2	0.6	0.1	3.2	4.5	3.8	3,404
30-39	18.6	0.8	4.0	29.4	25.2	3.1	4.8	6.9	0.8	0.1	2.7	4.0	3.6	5,345
40-49	17.6	0.8	4.4	27.2	22.3	3.8	4.2	5.9	0.4	0.0	2.4	4.5	2.9	2,961
<b>Marital status</b>														
Married	18.6	0.5	3.9	29.4	23.7	3.2	4.4	6.4	0.6	0.1	2.8	4.6	3.4	14,068
Widowed	19.5	3.1	3.6	22.6	24.5	1.6	3.3	5.6	0.3	0.9	2.9	3.1	4.1	430
Divorced	18.5	0.6	2.9	21.7	21.7	1.8	2.9	5.0	0.2	0.0	2.8	3.7	2.9	337
<b>Residence</b>														
Urban	14.5	0.9	6.1	36.9	30.5	4.7	7.0	8.7	0.7	0.1	3.3	3.3	4.1	6,175
Rural	21.5	0.4	2.3	23.4	18.8	2.0	2.5	4.7	0.5	0.1	2.4	5.4	3.0	8,660
<b>Region/Residence</b>														
Java-Bali	12.7	0.6	4.9	33.0	24.8	2.7	3.8	6.0	0.3	0.1	3.2	5.5	3.6	9,187
Urban	10.3	0.9	7.1	40.2	31.8	4.3	6.3	8.1	0.6	0.1	3.6	3.8	4.3	4,319
Rural	14.9	0.3	3.0	26.7	18.6	1.4	1.6	4.2	0.1	0.1	2.8	7.1	3.0	4,868
Outer Java-Bali I	27.3	0.7	2.3	21.9	21.9	3.5	5.1	6.6	0.7	0.1	1.8	2.6	2.7	4,075
Urban	23.1	0.8	3.9	29.3	28.0	5.6	9.1	0.4	0.8	0.0	1.9	1.9	2.9	1,305
Rural	29.2	0.6	1.5	18.5	19.0	2.5	3.3	4.8	0.7	0.1	1.8	2.9	2.6	2,770
Outer Java-Bali II	30.1	0.6	2.1	24.0	21.9	4.6	5.6	7.3	1.7	0.2	2.7	3.6	4.6	1,573
Urban	26.5	0.9	3.9	29.9	26.5	6.3	7.3	9.3	1.5	0.3	3.8	2.8	5.5	551
Rural	32.0	0.5	1.1	20.8	19.4	3.7	4.6	6.3	1.8	0.2	2.1	4.0	4.1	1,022
<b>Education</b>														
No education	28.7	1.0	1.4	11.8	6.1	1.3	0.3	4.4	0.2	0.0	1.1	3.7	1.3	516
Some primary	21.5	0.1	1.1	14.7	13.2	1.8	0.9	2.0	0.3	0.0	2.5	7.1	2.9	2,385
Completed primary	19.6	0.7	2.0	20.5	17.7	1.2	1.5	3.6	0.3	0.1	2.1	5.9	2.5	4,815
Some secondary+	16.1	0.7	6.3	40.9	32.5	5.0	7.8	9.8	0.9	0.2	3.4	2.8	4.5	7,119
<b>Total</b>	18.6	0.6	3.9	29.0	23.7	3.1	4.4	6.3	0.6	0.1	2.8	4.5	3.5	14,835

<sup>1</sup> Includes avoiding kissing, mosquito bites, and "other."

## 14.5 Knowledge and Use of Condoms

The great majority (86 percent) of currently married women who have heard of AIDS also know about condoms (Table 14.5.1). The proportions are smaller for women under age 20 (68 percent) and for women who have no education (70 percent). Knowledge of condoms among women who have heard of AIDS increases with level of education. Urban women are slightly more likely than rural women to know about condoms (93 percent compared with 81 percent).

Table 14.2.2 Knowledge of ways to avoid AIDS: region and province

Among ever-married women who have heard of AIDS, percentage who know of specific ways to avoid AIDS and percentage with misinformation, by background characteristics, Indonesia 1997

Region and province	Ways to avoid AIDS											Don't know any way	Percentage with any misinformation <sup>1</sup>	Number of women
	No way to avoid AIDS	Abstain from sex	Use condoms	Have only one sexual partner	Avoid sex with prostitutes	Avoid sex with homosexuals	Avoid transfusions	Avoid injections	Avoid kissing	Avoid mosquito bites	Other			
<b>Java-Bali</b>	12.7	0.6	4.9	33.0	24.8	2.7	3.8	6.0	0.3	0.1	3.2	5.5	3.6	9,187
DKI Jakarta	6.8	0.5	11.2	45.2	35.3	2.1	8.2	8.2	0.5	0.0	3.4	3.8	3.8	1,034
West Java	12.9	0.6	2.9	33.0	29.5	5.4	3.5	5.8	0.5	0.2	3.2	4.7	4.0	2,833
Central Java	11.6	0.0	5.3	35.6	18.9	1.6	3.1	5.6	0.2	0.0	1.5	5.5	1.7	2,019
DI Yogyakarta	8.9	1.0	7.6	53.1	23.9	1.9	13.4	4.7	0.2	0.0	2.7	3.5	3.0	296
East Java	15.4	1.1	3.9	24.7	20.4	1.1	2.0	4.9	0.2	0.1	4.5	7.6	4.8	2,740
Bali	18.5	0.2	5.2	29.8	24.4	2.6	3.0	5.1	0.3	0.0	0.9	3.1	1.2	264
<b>Outer Java-Bali I</b>	27.3	0.7	2.3	21.9	21.9	3.5	5.1	6.6	0.7	0.1	1.8	2.6	2.7	4,075
Dista Aceh	34.7	0.2	0.6	22.1	23.7	4.3	1.2	1.7	0.4	0.0	0.0	1.7	0.4	233
North Sumatra	25.1	0.2	1.9	17.9	19.5	2.5	4.5	7.8	0.6	0.1	1.2	2.6	2.0	993
West Sumatra	21.4	0.7	2.4	26.5	35.4	4.3	5.9	8.6	0.2	0.2	5.2	4.7	5.9	286
South Sumatra	21.2	0.5	3.2	28.0	26.8	6.6	7.7	10.7	0.1	0.0	2.5	1.8	2.6	630
Lampung	31.8	0.2	0.3	12.7	14.1	2.3	3.4	2.1	0.1	0.0	0.4	1.9	0.6	570
West Nusa Tenggara	26.5	0.7	1.3	26.7	27.2	3.0	5.7	6.9	1.2	0.0	1.9	4.3	3.2	197
West Kalimantan	25.7	0.8	1.6	18.8	20.3	4.4	6.6	8.6	5.3	0.0	2.8	5.0	8.1	220
South Kalimantan	37.8	0.2	1.6	20.2	28.2	4.2	6.0	6.5	0.2	0.0	1.7	3.8	2.0	251
North Sulawesi	41.7	1.5	1.7	16.1	12.1	3.9	7.8	7.7	1.0	0.1	1.3	2.4	2.5	260
South Sulawesi	21.8	2.6	6.8	36.2	21.5	1.2	3.6	3.6	1.0	0.2	2.7	0.9	3.7	433
<b>Outer Java-Bali II</b>	30.1	0.6	2.1	24.0	21.9	4.6	5.6	7.3	1.7	0.2	2.7	3.6	4.6	1,573
Riau	14.5	0.3	2.0	27.1	21.6	4.3	4.2	7.6	0.3	0.3	6.3	6.7	7.0	289
Jambi	51.4	0.4	1.9	16.8	17.7	5.2	4.9	3.8	0.4	0.2	0.4	2.7	0.9	185
Bengkulu	13.8	0.0	0.5	36.8	22.7	1.7	5.1	6.8	0.0	0.0	4.8	2.5	4.8	103
East Nusa Tenggara	49.4	0.7	1.0	13.8	8.5	1.8	3.4	3.5	0.9	0.0	1.0	1.3	1.9	120
East Timor	78.0	0.5	0.0	5.7	3.3	2.4	0.5	0.0	0.4	0.0	0.0	0.0	0.4	30
Central Kalimantan	24.3	2.1	0.1	38.3	23.4	4.2	8.3	7.9	2.7	0.0	0.7	1.0	3.4	105
East Kalimantan	21.2	0.9	5.5	28.5	27.9	4.0	4.9	7.2	1.0	0.3	4.9	4.1	6.0	274
Central Sulawesi	29.4	0.0	0.2	22.0	25.0	7.8	3.9	6.1	0.8	0.2	0.5	3.0	1.5	139
Southeast Sulawesi	21.9	1.2	4.0	33.0	21.2	2.8	7.4	8.2	1.2	0.4	1.2	5.4	2.8	80
Maluku	38.3	0.6	0.8	15.6	22.3	11.6	6.8	6.2	1.2	0.3	0.8	4.6	2.2	97
Irian Jaya	39.1	0.7	1.7	15.2	27.0	4.4	11.3	17.4	10.3	0.4	0.7	1.9	11.2	150
<b>Total</b>	18.6	0.6	3.9	29.0	23.7	3.1	4.4	6.3	0.6	0.1	2.8	4.5	3.5	14,835

<sup>1</sup> Includes avoiding kissing, mosquito bites, and "other."

Twenty-nine percent of women who have heard of AIDS and know about condoms say they would go to a government source for condoms; 13 percent would go to a private source such as a private hospital, a family planning clinic, or a doctor or a midwife; and 29 percent would go to a pharmacy. Public sources are more popular among older women, rural women, and women in the Outer Java-Bali II region. Pharmacies are a common source among women age 25 years and older, urban women, women living in Java-Bali, and better educated women.

Overall, only 7 percent of currently married women who know of AIDS have used condoms (Table 14.5.1). The use rate increases with age and education. Urban women are more than twice as likely to have used condoms as rural women (11 percent compared with 4 percent). Women who say they have a small or moderate risk of getting AIDS are much more likely to have used condoms than women who say that they



have a great risk (10 percent compared with 5 percent). The percentage of women who have used condoms is slightly higher among women who did not change their sexual behavior to avoid AIDS (7 percent) than among those who did change their sexual behavior (5 percent).

**Table 14.3.1 Perception of the risk of getting AIDS: background characteristics**

Percent distribution of ever-married women who have heard of AIDS by whether they believe AIDS can be cured, and by their perception of the risk of getting AIDS, according to background characteristics, Indonesia 1997

Background characteristic	Believe AIDS can be cured			Perception of the risk of getting AIDS					Total	Number of women
	Yes	No	Don't know	No risk at all	Small	Moderate	Great	Don't know		
<b>Age</b>										
15-19	27.6	49.4	23.0	71.4	6.2	8.2	0.9	13.3	100.0	685
20-24	27.2	53.5	19.2	70.0	8.2	9.8	0.5	11.5	100.0	2,440
25-29	27.2	57.5	15.3	69.9	8.5	11.2	0.7	9.7	100.0	3,404
30-39	23.8	57.2	19.0	69.8	7.5	10.1	0.7	12.0	100.0	5,345
40-49	21.1	57.1	21.8	69.6	7.9	8.9	0.6	12.9	100.0	2,961
<b>Marital status</b>										
Married	25.0	56.2	18.8	69.9	8.0	9.9	0.6	11.5	100.0	14,068
Widowed	18.4	57.8	23.8	68.7	3.3	11.9	1.1	15.1	100.0	430
Divorced	23.3	55.0	21.7	70.5	8.0	10.0	0.4	11.1	100.0	337
<b>Residence</b>										
Urban	25.9	58.2	15.9	68.0	10.2	11.0	0.9	9.9	100.0	6,175
Rural	24.0	54.9	21.2	71.2	6.2	9.3	0.5	12.8	100.0	8,660
<b>Region/Residence</b>										
Java-Bali	28.3	53.7	18.0	67.6	9.5	11.7	0.7	10.4	100.0	9,187
Urban	28.3	55.7	16.1	65.8	12.1	11.8	0.9	9.4	100.0	4,319
Rural	28.3	52.0	19.7	69.2	7.3	11.6	0.5	11.3	100.0	4,868
Outer Java-Bali I	19.5	59.5	21.1	74.2	5.3	6.1	0.3	13.9	100.0	4,075
Urban	20.4	63.7	15.9	74.6	6.4	7.5	0.4	11.2	100.0	1,305
Rural	19.0	57.5	23.5	74.1	4.8	5.5	0.3	15.2	100.0	2,770
Outer Java-Bali II	18.1	62.7	19.2	71.9	4.5	9.9	1.0	12.6	100.0	1,573
Urban	20.5	65.3	14.2	69.8	4.5	13.3	1.6	10.8	100.0	551
Rural	16.8	61.2	22.0	73.1	4.5	8.0	0.7	13.6	100.0	1,022
<b>Education</b>										
No education	22.3	46.9	30.7	67.9	2.7	8.0	0.3	21.1	100.0	516
Some primary	28.3	53.2	27.0	71.9	3.3	7.7	0.2	16.9	100.0	2,385
Completed primary	24.0	62.9	22.8	70.3	6.1	8.9	0.8	13.8	100.0	4,815
Some secondary+	24.3	62.9	12.8	69.1	10.9	11.6	0.7	7.7	100.0	7,119
<b>Total</b>	<b>24.8</b>	<b>56.3</b>	<b>19.0</b>	<b>69.9</b>	<b>7.8</b>	<b>10.0</b>	<b>0.6</b>	<b>11.6</b>	<b>100.0</b>	<b>14,835</b>

The percentage of women who have heard of AIDS and know about condoms varies from 44 percent in East Timor to almost 100 percent in DI Yogyakarta (Table 14.5.2). Among these women, 71 percent in DKI Jakarta would go to pharmacies for condoms, while in South Sulawesi, Central Sulawesi, Maluku, and Irian Jaya over 60 percent would go to a government source. The use of condoms among currently married women who know about AIDS ranges from 1 percent in East Timor to 21 percent in DI Yogyakarta.



Table 14.3.2 Perception of the risk of getting AIDS: region and province

Percent distribution of ever-married women who have heard of AIDS by whether they believe AIDS can be cured, and by their perception of the risk of getting AIDS, according to region and province, Indonesia 1997

Region and province	Believe AIDS can be cured			Perception of the risk of getting AIDS					Total	Number of women
	Yes	No	Don't know	No risk at all	Small	Moderate	Great	Don't know		
<b>Java-Bali</b>	28.3	53.7	18.0	67.6	9.5	11.7	0.7	10.4	100.0	9,187
DKI Jakarta	23.7	54.2	22.1	52.3	16.7	13.9	0.6	16.5	100.0	1,034
West Java	28.5	51.9	19.7	80.0	6.0	4.9	0.5	8.6	100.0	2,833
Central Java	25.2	56.7	18.1	57.7	17.6	9.7	1.1	13.8	100.0	2,019
DI Yogyakarta	20.3	65.0	14.7	65.6	8.9	19.1	0.3	6.1	100.0	296
East Java	34.5	51.8	13.8	68.6	4.9	18.6	0.8	7.1	100.0	2,740
Bali	10.8	59.1	30.1	61.7	7.2	11.0	0.6	19.5	100.0	264
<b>Outer Java-Bali I</b>	19.5	59.5	21.1	74.2	5.3	6.1	0.3	13.9	100.0	4,075
Dista Aceh	10.0	64.9	25.1	75.6	6.5	9.9	0.0	8.0	100.0	233
North Sumatra	20.6	47.7	31.6	72.6	5.0	4.9	0.1	17.2	100.0	993
West Sumatra	29.2	63.3	7.5	78.4	3.6	7.3	0.5	10.3	100.0	286
South Sumatra	20.5	61.4	18.0	57.6	12.0	10.2	1.2	18.9	100.0	630
Lampung	17.5	61.1	21.4	78.2	2.4	3.7	0.0	15.6	100.0	570
West Nusa Tenggara	25.8	55.5	18.7	77.2	2.0	10.6	0.5	9.6	100.0	197
West Kalimantan	29.6	56.4	14.0	78.5	5.2	7.7	0.6	8.1	100.0	220
South Kalimantan	20.5	67.3	12.2	76.4	3.9	9.1	0.0	10.6	100.0	251
North Sulawesi	10.0	71.4	18.8	89.2	4.9	1.1	0.3	4.5	100.0	260
South Sulawesi	13.7	68.3	18.0	79.7	3.0	2.4	0.2	14.6	100.0	433
<b>Outer Java-Bali II</b>	18.1	62.7	19.2	71.9	4.5	9.9	1.0	12.6	100.0	1,573
Riau	27.8	53.7	18.6	63.7	4.6	10.8	1.0	19.9	100.0	289
Jambi	12.2	73.5	14.4	77.4	3.0	8.9	0.5	10.1	100.0	185
Bengkulu	22.5	55.5	22.0	69.9	3.8	9.8	0.2	16.2	100.0	103
East Nusa Tenggara	10.4	65.8	23.8	84.0	2.5	1.1	0.5	11.8	100.0	120
East Timor	5.4	82.1	12.7	92.8	0.4	1.0	0.0	5.9	100.0	30
Central Kalimantan	23.5	56.2	20.3	80.1	12.1	2.6	1.0	4.4	100.0	105
East Kalimantan	23.7	62.9	13.4	60.4	4.2	21.8	2.6	10.9	100.0	274
Central Sulawesi	12.2	59.5	28.2	71.5	11.3	3.1	0.2	13.9	100.0	139
Southeast Sulawesi	11.1	69.0	19.9	86.8	0.7	1.2	0.0	11.4	100.0	80
Maluku	14.6	58.5	26.8	78.3	1.2	7.2	2.6	10.7	100.0	97
Irian Jaya	9.6	72.2	17.9	72.3	2.0	14.3	0.4	10.8	100.0	150
<b>Total</b>	24.8	56.3	19.0	69.9	7.8	10.0	0.6	11.6	100.0	14,835

**Table 14.4.1 AIDS prevention behavior: background characteristics**

Among currently married women who have heard of AIDS, percentage who made specific changes in sexual behavior in order to avoid AIDS, by perception of AIDS risk and background characteristics, Indonesia 1997

Background characteristic	No change in sexual behavior	Change in behavior to avoid AIDS					Number of women
		Stopped sex	Began using condoms	Restricted to one partner	Fewer partners	Other sexual behavior	
<b>Perception of AIDS risk</b>							
<i>Among those who believe AIDS cannot be cured or don't know</i>							
No/small risk	94.8	0.1	0.0	2.0	0.1	0.9	8,173
Moderate/great risk	96.6	0.8	0.7	1.1	0.1	0.3	1,024
Don't know	81.8	0.0	0.0	0.6	0.0	0.2	1,353
<i>Among those who believe AIDS can be cured or don't know</i>							
No/small risk	95.2	0.6	0.2	2.2	0.1	0.2	2,786
Moderate/great risk	94.5	0.5	0.1	1.5	0.4	0.8	463
Don't know	83.8	1.8	0.0	0.2	0.1	0.1	269
<b>Age</b>							
15-19	92.9	0.1	0.0	2.5	0.0	0.1	655
20-24	93.2	0.3	0.2	1.8	0.3	0.4	2,372
25-29	94.3	0.3	0.0	1.7	0.0	0.2	3,297
30-39	93.5	0.4	0.0	1.7	0.1	0.2	5,105
40-49	92.9	0.1	0.2	1.9	0.1	0.1	2,639
<b>Residence</b>							
Urban	93.4	0.3	0.1	2.5	0.1	0.3	5,776
Rural	93.6	0.3	0.1	1.3	0.1	0.1	8,292
<b>Region/Residence</b>							
Java-Bali	93.7	0.3	0.1	1.9	0.1	0.2	8,687
Urban	92.6	0.3	0.2	2.7	0.1	0.4	4,029
Rural	94.5	0.3	0.1	1.2	0.1	0.1	4,658
Outer Java-Bali I	93.9	0.3	0.1	1.1	0.1	0.1	3,876
Urban	96.2	0.1	0.0	1.3	0.0	0.0	1,222
Rural	92.8	0.3	0.1	0.9	0.2	0.2	2,654
Outer Java-Bali II	91.7	0.4	0.1	3.1	0.1	0.4	1,505
Urban	92.4	0.7	0.2	3.7	0.2	0.3	525
Rural	91.4	0.2	0.0	2.7	0.1	0.4	981
<b>Education</b>							
No education	94.2	0.6	0.0	0.7	0.0	0.0	474
Some primary	92.6	0.3	0.0	0.6	0.2	0.4	2,201
Completed primary	92.4	0.3	0.1	1.9	0.0	0.1	4,588
Some secondary+	94.5	0.3	0.1	2.2	0.1	0.3	6,805
Total	93.5	0.3	0.1	1.8	0.1	0.2	14,068

Table 14.4.2 AIDS prevention behavior: region and province

Among currently married women who have heard of AIDS, percentage who made specific changes in sexual behavior in order to avoid AIDS, by region and province, Indonesia 1997

Region and province	No change in sexual behavior	Change in behavior to avoid AIDS					Number of women
		Stopped sex	Began using condoms	Restricted to one partner	Fewer partners	Other sexual behavior	
<b>Java-Bali</b>	93.7	0.3	0.1	1.9	0.1	0.2	8,687
DKI Jakarta	81.9	0.5	0.2	9.0	0.5	0.4	953
West Java	93.8	0.5	0.1	1.1	0.1	0.3	2,692
Central Java	93.3	0.0	0.1	1.4	0.0	0.1	1,946
DI Yogyakarta	98.0	0.5	0.2	0.8	0.0	0.1	283
East Java	97.4	0.3	0.1	0.8	0.0	0.2	2,553
Bali	96.7	0.5	0.0	0.2	0.0	0.1	256
<b>Outer Java-Bali I</b>	93.9	0.3	0.1	1.1	0.1	0.1	3,876
Dista Aceh	98.1	0.0	0.0	0.0	0.0	0.0	220
North Sumatra	89.3	0.0	0.0	1.7	0.3	0.2	948
West Sumatra	97.2	0.0	0.0	0.2	0.0	0.0	274
South Sumatra	96.6	1.0	0.0	0.3	0.0	0.3	591
Lampung	93.5	0.3	0.0	0.2	0.0	0.1	550
West Nusa Tenggara	96.6	0.0	0.0	0.6	0.0	0.2	181
West Kalimantan	93.6	0.0	0.7	1.5	0.2	0.2	208
South Kalimantan	96.4	0.2	0.0	1.1	0.0	0.0	236
North Sulawesi	93.9	0.1	0.0	2.1	0.0	0.3	252
South Sulawesi	94.0	0.3	0.2	2.5	0.2	0.0	416
<b>Outer Java-Bali II</b>	91.7	0.4	0.1	3.1	0.1	0.4	1,505
Riau	95.5	0.3	0.0	0.5	0.0	0.2	277
Jambi	83.3	0.3	0.0	12.0	0.0	0.4	177
Bengkulu	97.4	0.5	0.0	0.3	0.0	0.6	100
East Nusa Tenggara	94.3	0.0	0.0	1.3	0.0	0.4	115
East Timor	85.7	0.0	0.0	12.9	0.4	0.0	29
Central Kalimantan	93.6	0.7	0.0	4.1	0.4	0.4	100
East Kalimantan	91.8	0.7	0.3	1.3	0.4	0.4	262
Central Sulawesi	92.3	0.0	0.0	1.5	0.4	1.2	132
Southeast Sulawesi	96.8	0.0	0.0	0.7	0.0	0.0	76
Maluku	87.2	0.6	0.0	3.4	0.0	0.0	93
Irian Jaya	88.7	0.4	0.4	3.3	0.0	0.0	144
<b>Total</b>	93.5	0.3	0.1	1.8	0.1	0.2	14,068



**Table 14.5.1 Knowledge of condoms: background characteristics**

Among currently married women who have heard of AIDS, percentage who know about condoms, percentage who know a specific source for condoms, and percentage who have used condoms, by selected background characteristics, Indonesia 1997

Background characteristic	Know about condoms	Source for condoms					Percentage who have used condoms	Number of women
		Public sector	Private medical	Private pharmacy	Other private	Don't know/ Missing		
<b>Age</b>								
15-19	67.9	23.1	10.4	16.2	4.7	45.6	0.5	655
20-24	80.0	26.7	11.7	24.2	4.2	33.1	1.7	2,372
25-29	86.7	26.9	13.7	30.7	5.4	23.3	5.2	3,297
30-39	89.2	30.2	13.4	31.0	6.2	19.2	8.6	5,105
40-49	88.2	30.6	12.1	32.1	6.0	19.2	11.2	2,639
<b>Residence</b>								
Urban	92.8	21.8	13.6	47.2	3.2	14.4	10.5	5,776
Rural	81.0	33.3	12.3	16.9	7.2	30.2	4.2	8,292
<b>Region/Residence</b>								
Java-Bali	85.8	20.2	10.6	37.2	4.9	27.1	7.4	8,687
Urban	92.8	15.3	11.4	54.4	2.9	16.0	11.0	4,029
Rural	79.8	24.5	9.9	22.5	6.6	36.6	4.4	4,658
Outer Java-Bali I	86.7	39.6	19.1	16.9	6.8	17.5	5.0	3,876
Urban	93.1	34.6	19.9	31.9	3.5	10.2	8.3	1,227
Rural	83.7	41.8	18.8	10.1	8.2	20.9	3.5	2,654
Outer Java-Bali II	84.2	48.6	9.3	15.5	6.0	20.6	7.2	1,505
Urban	92.4	41.4	14.9	27.4	4.5	11.8	11.7	525
Rural	79.8	52.5	6.2	9.0	6.9	25.3	4.9	981
<b>Education</b>								
No education	70.0	24.2	7.7	20.0	5.6	42.5	1.6	474
Some primary	79.4	31.9	10.6	16.6	8.4	32.4	4.6	2,201
Completed primary	80.2	27.8	11.9	21.6	5.9	32.8	3.9	4,588
Some secondary+	92.9	28.4	14.5	39.2	4.4	13.5	9.7	6,805
<b>Perception of AIDS risk</b>								
No risk at all	84.9	28.6	13.3	27.8	5.4	24.8	6.3	9,835
Small	93.4	24.8	11.0	48.5	4.2	11.5	9.8	1,124
Moderate	91.3	27.6	11.5	35.9	7.1	17.9	10.1	1,397
Great	83.4	26.8	21.5	27.5	1.7	22.4	5.0	90
Don't know/Missing	81.7	32.3	11.6	19.3	6.1	30.8	4.5	1,622
<b>Change in behavior to avoid AIDS</b>								
Changed behavior	84.0	27.9	8.4	34.6	4.2	24.9	5.3	913
No change	86.0	28.6	13.1	28.9	5.7	23.7	6.8	13,155
<b>Total</b>	<b>85.8</b>	<b>28.6</b>	<b>12.8</b>	<b>29.3</b>	<b>5.6</b>	<b>23.8</b>	<b>6.7</b>	<b>14,068</b>

**Table 14.5.2 Knowledge of condoms: region and province**

Among currently married women who have heard of AIDS, percentage who know about condoms, percentage who know a specific source for condoms, and percentage who have used condoms, by region and province, Indonesia 1997

Region and province	Know about condoms	Source for condoms					Percentage who have used condoms	Number of women
		Public sector	Private medical	Private pharmacy	Other private	Don't know/ Missing		
<b>Java-Bali</b>	85.8	20.2	10.6	37.2	4.9	27.1	7.4	8,687
DKI Jakarta	97.0	11.6	11.0	70.7	0.7	6.0	10.5	953
West Java	79.4	14.5	13.3	33.7	2.5	35.8	3.8	2,692
Central Java	92.8	22.4	7.3	39.6	6.4	24.4	8.6	1,946
DI Yogyakarta	99.5	45.8	10.2	18.1	21.4	4.5	20.7	283
East Java	81.7	23.3	9.2	30.7	6.4	30.5	8.0	2,553
Bali	86.0	37.0	19.9	17.8	1.3	23.9	5.1	256
<b>Outer Java-Bali I</b>	86.7	39.6	19.1	16.9	6.8	17.5	5.0	3,876
Dista Aceh	80.7	48.1	8.6	18.4	5.2	19.6	4.9	220
North Sumatra	88.8	25.4	27.9	27.9	3.7	15.0	6.0	948
West Sumatra	91.4	35.5	31.5	14.7	4.5	14.0	7.1	274
South Sumatra	91.5	43.9	16.5	15.9	10.1	13.5	7.7	591
Lampung	85.2	27.1	29.0	12.5	14.0	17.4	4.6	550
West Nusa Tenggara	85.7	56.3	2.5	17.1	3.0	21.0	3.1	181
West Kalimantan	79.7	49.2	5.0	16.8	5.3	23.7	4.6	208
South Kalimantan	90.2	43.9	16.4	13.1	5.8	20.8	4.6	236
North Sulawesi	81.4	49.5	12.4	8.8	6.4	22.8	1.6	252
South Sulawesi	82.0	60.2	7.6	7.4	4.5	20.4	2.0	416
<b>Outer Java-Bali II</b>	84.2	48.6	9.3	15.5	6.0	20.6	7.2	1,505
Riau	90.8	36.4	15.6	23.9	7.2	16.9	9.8	277
Jambi	75.9	41.7	12.0	17.1	3.7	25.4	6.5	177
Bengkulu	92.0	36.4	14.8	18.1	13.4	17.2	16.0	100
East Nusa Tenggara	69.0	58.3	2.7	1.4	5.1	32.6	1.6	115
East Timor	44.3	38.0	0.4	5.9	0.0	55.7	0.9	29
Central Kalimantan	85.7	52.9	5.7	23.6	2.6	15.1	2.3	100
East Kalimantan	93.9	41.6	12.3	22.3	7.0	16.9	13.7	262
Central Sulawesi	84.8	61.7	1.5	12.1	4.6	20.2	2.0	132
Southeast Sulawesi	86.1	51.8	5.6	12.3	15.9	14.6	2.6	76
Maluku	83.3	66.5	10.2	3.3	2.7	17.3	1.9	93
Irian Jaya	76.7	68.0	2.4	3.0	2.9	23.8	5.4	144
<b>Total</b>	85.8	28.6	12.8	29.3	5.6	23.8	6.7	14,068

## REFERENCES

- Central Bureau of Statistics (CBS) [Indonesia]. 1978. *Indonesia Fertility Survey, Principal Report*. 2 vols. Jakarta: CBS.
- Central Bureau of Statistics (CBS) [Indonesia]. 1987. *Population of Indonesia. Results of the 1985 Intercensal Population Survey*. Supas Series No. 5. Jakarta: CBS.
- Central Bureau of Statistics (CBS) [Indonesia]. 1992. *Summary of the 1990 Population Census Results*. Jakarta: CBS.
- Central Bureau of Statistics (CBS) [Indonesia]. 1993. *Statistical Yearbook of Indonesia 1992*. Jakarta: CBS.
- Central Bureau of Statistics (CBS) [Indonesia]. 1994. *Fertility, Mortality and Migration Trends (Trend Fertilitas, Mortalitas dan Migrasi)*. Jakarta: CBS.
- Central Bureau of Statistics (CBS) [Indonesia]. 1997a. *Population Projection of Indonesia by Province 1990-2000 (Proyeksi Penduduk Indonesia Menurut Propinsi 1990-2000)*. Jakarta: CBS.
- Central Bureau of Statistics (CBS) [Indonesia]. 1997b. *Estimates of Fertility, Mortality and Migration: Results of the 1995 Intercensal Population Survey (Estimasi Fertilitas, Mortalitas dan Migrasi: Hasil Survey Penduduk Antar Sensus 1995)*. Jakarta: CBS.
- Central Bureau of Statistics (CBS) [Indonesia]. 1998. *Population Projection of Indonesia by Province 1995-2000 (Proyeksi Penduduk Indonesia per Propinsi 1995-2005)*. Jakarta: CBS.
- Central Bureau of Statistics (CBS) [Indonesia], National Family Planning Coordinating Board, and Institute for Resource Development/Westinghouse (IRD). 1989. *National Indonesia Contraceptive Prevalence Survey 1987*. Columbia, Maryland: CBS and IRD.
- Central Bureau of Statistics (CBS) [Indonesia], National Family Planning Coordinating Board, and Ministry of Health and Macro International Inc. (MI). 1992. *Indonesia Demographic and Health Survey 1991*. Columbia, Maryland: CBS and MI.
- Central Bureau of Statistics (CBS) [Indonesia], and State Ministry of Population/National Family Planning Coordinating Board, and Ministry of Health and Macro International Inc. (MI). 1995. *Indonesia Demographic and Health Survey 1994*. Calverton, Maryland: CBS and MI.
- Ministry of Health (National Institute of Health and Development). 1991. *The Trend Assessment of Health Development in Indonesia: A Study for Providing Basic Inputs to the Second Long Term Health Development Program*. Jakarta, Indonesia.
- Mosley, W.H. and L.C. Chen. 1984. An Analytical Framework for the Study of Child Survival in Developing Countries. In *Child Survival: Strategies for Research*, ed. W.H. Mosley and Lincoln C. Chen, 25-45. Population and Development Review 10, Supplement. New York: The Population Council.
- Sullivan, Jeremiah M., George T. Bicego and Shea Oscar Rutstein. 1990. Assessment of the Quality of Data Used for the Direct Estimation of Infant and Child Mortality in the Demographic and Health Surveys. In *An Assessment of DHS-I Data Quality*. DHS Methodological Reports No. 1. Columbia, Maryland: Institute for Resource Development/Macro Systems Inc.
- Westoff, Charles F. and Luis H. Ochoa. 1991. *Unmet Need and the Demand for Family Planning*. DHS Comparative Studies No. 5. Columbia, Maryland: Institute for Resource Development.





**APPENDIX A**

**SURVEY DESIGN**





## APPENDIX A

### SURVEY DESIGN

The main objective of the 1997 Indonesia Demographic and Health Survey (IDHS) was to provide information on fertility, family planning, maternal and child health, and maternal and child mortality that can be used by program managers and policy makers to evaluate and improve existing programs. The survey is a follow-on to the 1987 National Indonesia Contraceptive Prevalence Survey (NICPS), the 1991 IDHS and the 1994 IDHS. All of these surveys were carried out by the Central Bureau of Statistics (CBS).

#### A.1 Sample Design and Implementation

Indonesia is divided into 27 provinces. For the implementation of its family planning program, the National Family Planning Coordinating Board (NFPCB) has divided these provinces into three regions as follows:

**Java-Bali:** DKI Jakarta, West Java, Central Java, DI Yogyakarta, East Java, and Bali

**Outer Java-Bali I:** Dista Aceh, North Sumatra, West Sumatra, South Sumatra, Lampung, West Nusa Tenggara, West Kalimantan, South Kalimantan, North Sulawesi, and South Sulawesi

**Outer Java-Bali II:** Riau, Jambi, Bengkulu, East Nusa Tenggara, East Timor, Central Kalimantan, East Kalimantan, Central Sulawesi, Southeast Sulawesi, Maluku, and Irian Jaya

The 1990 Population Census of Indonesia shows that Java-Bali accounts for 62 percent of the national population, Outer Java-Bali I accounts for 27 percent, and Outer Java-Bali II accounts for 11 percent. The sample for the 1997 IDHS was designed to produce reliable estimates of fertility, contraceptive prevalence and other important variables for each of the provinces and urban and rural areas of the three regions.

In order to meet this objective, between 1,650 and 2,050 households were selected in each of the provinces in Java-Bali, 1,250 to 1,500 households in the ten provinces in Outer Java-Bali I, and 1,000 to 1,250 households in each of the provinces in Outer Java-Bali II, for a total of 35,500 households. With an average of 0.8 ever-married women 15-49 per household, the sample was expected to yield approximately 28,000 women eligible for the individual interview.

The 1997 IDHS sample is a replication of the 1994 IDHS sample. The sample is stratified by province and by urban and rural domain within each province. The sample was selected in three stages. In the first stage, census enumeration areas (EAs) were selected systematically with probability proportional to population size. In each EA, segments of approximately 70 contiguous households with clear boundaries were formed, and only one segment was selected with a probability proportional to size. In the third stage, 25 households were selected from each segment using a systematic sampling. A complete listing of all households in the selected segments was carried out prior to the selection of households.

Since the sample was designed to produce estimates at the provincial level, the households selected at the provincial level did not constitute a proportional representation at the national level. Specifically, households in Outer Java-Bali II were oversampled. The results presented in this report are based on data that were weighted to take account of differential sampling probabilities and nonresponse at both the household and individual levels. The weights are used to produce estimates that are representative at the appropriate level of aggregation (e.g., provincial, regional, and national).

Results of the sample implementation by region and by urban-rural residence as well as by province are shown in Tables A.1 and A.2. As shown in Table A.1, 35,362 households were selected for the 1997 IDHS. Of these, 97 percent were successfully interviewed, 1 percent were not interviewed because there was no competent respondent, 1 percent were found to be vacant, and 1 percent were away during the survey fieldworkers' visit. Other reasons for not interviewing include no competent respondent in the household or the dwelling had been destroyed. The overall household response rate is 99 percent (see Table A.1 for definition). The level of successful household interviews ranges from less than 94 percent in Central Kalimantan and Southeast Sulawesi to 100 percent in East Timor. The response rates are slightly higher in rural than in urban areas.

Table A.2 presents the survey coverage for the individual interview by region and type of residence. The eligible woman response rate for the 1997 IDHS is 98 percent. The response rates for eligible women are generally lower than household response rates, but range from 95 percent in Bengkulu and Jambi to 100 percent in East Timor. There is little variation by urban-rural residence. The overall response rate--which is the product of the household response rate and the eligible woman response rate--is 97 percent.

## **A.2 Pretest**

Since all of the survey instruments except the family welfare questionnaire were the same as those used in the 1994 IDHS, the pretest was focused on this questionnaire. Six male and four female CBS staff participated in the pretest. Two of the female staff were from the West Java Province Statistics Office (PSO). The pretest training was conducted by CBS staff for three days in June 1997, followed by the data collection, which lasted for three days. The pretest took place in a location outside Jakarta, the capital.

For the pretest fieldwork, a total of 100 households, 121 family welfare and 44 individual women questionnaires were completed. Problems encountered during the pretest training and fieldwork were discussed among the collaborating agencies: NFPCB, CBS, and the Ministry of Health. Based on these discussions, the family welfare questionnaire was finalized. While the household expenditure schedule is a part of the Household Questionnaire, it was decided that it would be administered after the interview with the eligible women in the household had been completed. The family welfare questionnaire would be asked last.

## **A.3 Field Staff Training**

Training of the survey field staff for the main survey was preceded by a course for prospective instructors of field workers, persons who were responsible for the training centers, and the data processing staff. This training was held in August 1997 in Bogor. CBS staff who participated in previous DHS surveys served as trainers.

Training for the main survey took place in nine locations spread throughout the country: Medan (North Sumatra), Palembang (South Sumatra), Jakarta (DKI Jakarta), Salatiga (Central Java), Malang (East Java), Kupang (East Nusa Tenggara), Balikpapan (East Kalimantan), and Ujung Pandang (South Sulawesi). The training lasted for 16 days. Due to variability in the availability of funds, the training did not take place simultaneously in all training centers. The training was patterned after past IDHS experiences and followed the model DHS training guidelines. Procedures for locating the sample households, conducting an interview, and filling out the forms, as well as tests, mock interviews and field practice were included in the training.



Table A.1 Sample implementation: results of the household interview

Percent distribution of households in the DHS sample by results of the household interview, and household response rates, according to region, province, and urban-rural residence, Indonesia 1997

Region and province	Household interviews completed (C)	Household present but no competent respondent at home (NP)	Postponed (PP)	Refused (R)	Dwelling not found (DNF)	Household absent (HA)	Dwelling vacant (DV)	Dwelling destroyed (DD)	Total	Number	Household response rate <sup>1</sup> (HRR)
<b>Java-Bali</b>	96.7	1.0	0.0	0.2	0.0	0.8	1.1	0.2	100.0	11,152	98.7
DKI Jakarta	95.4	0.3	0.0	0.7	0.1	0.8	2.5	0.2	100.0	2,057	98.8
West Java	95.3	1.8	0.0	0.0	0.0	1.1	1.2	0.4	100.0	2,102	98.1
Central Java	97.9	1.2	0.0	0.0	0.0	0.7	0.1	0.0	100.0	1,843	98.7
DI Yogyakarta	97.8	0.7	0.0	0.1	0.1	0.4	0.9	0.0	100.0	1,655	99.1
East Java	98.1	0.6	0.0	0.1	0.0	0.6	0.6	0.0	100.0	1,867	99.3
Bali	96.1	1.7	0.0	0.0	0.0	0.7	1.2	0.3	100.0	1,628	98.3
<b>Outer Java-Bali I</b>	97.5	0.8	0.0	0.0	0.0	1.2	0.4	0.1	100.0	13,017	99.2
Dista Aceh	99.2	0.1	0.0	0.0	0.0	0.5	0.2	0.0	100.0	1,252	99.9
North Sumatra	99.1	0.5	0.0	0.0	0.0	0.1	0.3	0.0	100.0	1,500	99.5
West Sumatra	96.0	1.4	0.0	0.0	0.0	1.4	1.2	0.0	100.0	1,249	98.5
South Sumatra	98.2	0.4	0.0	0.0	0.0	1.4	0.1	0.0	100.0	1,251	99.6
Lampung	96.9	0.0	0.0	0.0	0.0	2.5	0.2	0.4	100.0	1,250	100.0
West Nusa Tenggara	98.8	0.2	0.0	0.0	0.0	0.4	0.3	0.2	100.0	1,264	99.8
West Kalimantan	96.1	1.4	0.0	0.0	0.0	1.2	0.8	0.5	100.0	1,251	98.5
South Kalimantan	97.6	1.7	0.0	0.0	0.0	0.0	0.7	0.0	100.0	1,249	98.3
North Sulawesi	94.3	2.3	0.0	0.0	0.0	3.1	0.0	0.2	100.0	1,250	97.6
South Sulawesi	98.3	0.2	0.0	0.0	0.0	1.5	0.0	0.0	100.0	1,501	99.8
<b>Outer Java-Bali II</b>	96.3	1.3	0.0	0.0	0.0	1.7	0.5	0.1	100.0	11,193	98.6
Riau	97.0	0.8	0.0	0.1	0.0	0.2	1.8	0.2	100.0	1,250	99.1
Jambi	95.9	0.7	0.0	0.0	0.0	3.1	0.3	0.0	100.0	1,000	99.3
Bengkulu	96.6	3.0	0.0	0.0	0.0	0.1	0.2	0.1	100.0	998	97.0
East Nusa Tenggara	97.4	0.7	0.0	0.0	0.0	1.7	0.2	0.0	100.0	1,000	99.3
East Timor	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,000	100.0
Central Kalimantan	93.5	2.4	0.0	0.0	0.1	2.7	1.2	0.1	100.0	999	97.4
East Kalimantan	95.4	2.3	0.0	0.1	0.0	1.7	0.4	0.1	100.0	999	97.5
Central Sulawesi	96.1	0.5	0.0	0.1	0.0	3.2	0.1	0.0	100.0	1,000	99.4
Southeast Sulawesi	93.5	3.7	0.0	0.0	0.1	2.3	0.3	0.1	100.0	1,000	96.1
Maluku	96.6	0.2	0.0	0.0	0.0	2.8	0.2	0.2	100.0	997	99.8
Irian Jaya	97.3	0.6	0.0	0.1	0.0	1.7	0.2	0.1	100.0	950	99.2
<b>Residence</b>											
Urban	96.1	1.1	0.0	0.2	0.0	1.2	1.2	0.1	100.0	10,302	98.6
Rural	97.2	1.0	0.0	0.0	0.0	1.2	0.4	0.1	100.0	25,060	98.9
<b>Total</b>	96.9	1.1	0.0	0.1	0.0	1.2	0.6	0.1	100.0	35,362	98.8

<sup>1</sup>The household response rate (HRR) is calculated as:

$$\frac{C}{C + HP + R + DNF}$$



Table A.2 Sample implementation: results of the individual interview

Percent distribution of eligible women in the sample by results of the individual interview, eligible woman response rates, and overall response rates, according to region, province, and urban-rural residence, Indonesia 1997

Region and province	Individual interviews completed (C)	Not at home (NH)	Post-poned (PP)	Refused (R)	Partly completed (PC)	In-capacitated (I)	Other (O)	Total	Number	Eligible woman response rate <sup>1</sup> (EWRR)	Overall response rate <sup>2</sup> (ORR)
<b>Java-Bali</b>	97.9	1.6	0.0	0.1	0.1	0.2	0.0	100.0	8,920	97.9	96.7
DKI Jakarta	98.9	0.7	0.0	0.2	0.2	0.0	0.1	100.0	1,804	98.9	97.7
West Java	98.0	1.6	0.1	0.0	0.1	0.2	0.0	100.0	1,622	98.0	96.2
Central Java	97.8	1.5	0.0	0.2	0.3	0.2	0.0	100.0	1,515	97.8	96.6
DI Yogyakarta	99.2	0.7	0.0	0.0	0.0	0.2	0.0	100.0	1,072	99.2	98.2
East Java	98.1	1.2	0.0	0.3	0.0	0.4	0.0	100.0	1,559	98.1	97.5
Bali	95.4	3.9	0.0	0.1	0.1	0.4	0.0	100.0	1,348	95.4	93.8
<b>Outer Java-Bali I</b>	98.7	1.1	0.0	0.0	0.0	0.1	0.0	100.0	10,993	98.7	97.9
Dista Aceh	99.3	0.6	0.0	0.0	0.0	0.1	0.0	100.0	1,155	99.3	99.2
North Sumatra	99.9	0.1	0.0	0.0	0.0	0.0	0.0	100.0	1,409	99.9	99.4
West Sumatra	97.7	1.8	0.0	0.2	0.1	0.1	0.0	100.0	926	97.7	96.3
South Sumatra	98.8	0.9	0.0	0.0	0.1	0.2	0.0	100.0	1,115	98.8	98.4
Lampung	99.2	0.5	0.2	0.0	0.0	0.1	0.0	100.0	1,011	99.2	99.2
West Nusa Tenggara	99.5	0.4	0.0	0.0	0.0	0.2	0.0	100.0	1,111	99.5	99.2
West Kalimantan	98.1	1.7	0.0	0.0	0.0	0.2	0.0	100.0	1,020	98.1	96.7
South Kalimantan	98.4	1.5	0.0	0.0	0.0	0.1	0.0	100.0	1,073	98.4	96.7
North Sulawesi	97.4	2.6	0.0	0.0	0.0	0.0	0.0	100.0	883	97.4	95.1
South Sulawesi	98.3	1.6	0.0	0.0	0.0	0.1	0.0	100.0	1,290	98.3	98.1
<b>Outer Java-Bali II</b>	98.1	1.6	0.0	0.1	0.1	0.1	0.0	100.0	9,404	98.1	96.6
Riau	98.9	1.1	0.0	0.0	0.0	0.0	0.0	100.0	1,015	98.9	98.0
Jambi	99.9	0.1	0.0	0.0	0.0	0.0	0.0	100.0	867	99.9	99.2
Bengkulu	95.3	4.6	0.0	0.0	0.1	0.0	0.0	100.0	801	95.3	92.4
East Nusa Tenggara	98.0	1.1	0.1	0.2	0.2	0.4	0.0	100.0	850	98.0	97.3
East Timor	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	920	100.0	100.0
Central Kalimantan	98.6	1.3	0.0	0.0	0.0	0.1	0.0	100.0	776	98.6	96.0
East Kalimantan	96.2	3.4	0.1	0.0	0.2	0.1	0.0	100.0	890	96.2	93.8
Central Sulawesi	99.1	0.8	0.0	0.0	0.0	0.1	0.0	100.0	888	99.1	98.5
Southeast Sulawesi	95.9	3.1	0.0	0.1	0.0	0.8	0.0	100.0	762	95.9	92.2
Maluku	97.6	2.4	0.0	0.0	0.0	0.0	0.0	100.0	829	97.6	97.4
Irian Jaya	98.5	0.6	0.0	0.6	0.0	0.2	0.0	100.0	806	98.5	97.8
<b>Residence</b>											
Urban	98.4	1.2	0.0	0.1	0.1	0.1	0.0	100.0	8,253	98.4	97.0
Rural	98.2	1.5	0.0	0.1	0.0	0.2	0.0	100.0	21,064	98.2	97.2
<b>Total</b>	98.3	1.4	0.0	0.1	0.1	0.2	0.0	100.0	29,317	98.3	97.1

<sup>1</sup>The eligible woman response rate (EWRR) is calculated as:

$$\frac{C}{C + NH + PP + R + PC + I + O}$$

<sup>2</sup>The overall response rate (ORR) is calculated as: HRR × EWRR.

## **A.4 Fieldwork**

The 1997 IDHS data were collected by 284 interviewers, 86 field editors and 86 supervisors. Each of the 86 teams consisted of two to four interviewers, one field editor and one supervisor. As in previous DHS surveys, the number of teams in each province was determined by the number of segments selected in the respective province and their distribution throughout the area. Due to the sensitive nature of some questions asked in the survey, all interviewers and field editors were female. However, for logistical and security reasons, male supervisors were used. Most of the survey fieldworkers were CBS staff at the province or regency/municipality level.

The teams completed work in each segment before moving to the next segment. Generally, the teams were responsible for arranging transportation between sample areas. However, in some areas, local statistics offices provided transportation. In each province, the PSO Director was responsible for the implementation of the survey in his/her province, while the Chief of the Population and Social Statistics Division was assigned as the Technical Coordinator. During the course of data collection, PSO and CBS staff visited the field periodically to monitor the progress of the fieldwork. The main survey fieldwork began on September 1, 1997 in South Sumatra. The last segment was completed on December 31, 1997.

## **A.5 Data Processing**

The first stage of data editing was carried out by the field editors who checked the completed questionnaires for thoroughness and accuracy. Field supervisors then further examined the questionnaires. In many instances, the teams sent the questionnaires to CBS through the regency/municipality statistics offices. In these cases, no checking was done by the PSO. In other cases, Technical Coordinators are responsible for reviewing the completeness of the forms. At CBS, the questionnaires underwent another round of editing, primarily for completeness and coding of responses to open-ended questions.

The data were processed using microcomputers and the DHS computer program, ISSA (Integrated System for Survey Analysis). Data entry and office editing were initiated immediately after fieldwork began. Simple range and skip errors were corrected at the data entry stage. Data processing was completed by February 1998, and the preliminary report of the survey was published in April 1998.





## **APPENDIX B**

### **ESTIMATES OF SAMPLING ERRORS**



## APPENDIX B

### ESTIMATES OF SAMPLING ERRORS

The estimates from a sample survey are affected by two types of errors: (1) nonsampling errors, and (2) sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 1997 IDHS to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 1997 IDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 1997 IDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the 1997 IDHS is the ISSA Sampling Error Module. This module used the Taylor linearization method of variance estimation for survey estimates that are means or proportions. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate,  $r = y/x$ , where  $y$  represents the total sample value for variable  $y$ , and  $x$  represents the total number of cases in the group or subgroup under consideration. The variance of  $r$  is computed using the formula given below, with the standard error being the square root of the variance:

$$var_T(r) = \frac{1-f}{x^2} \sum_{h=1}^H \left[ \frac{m_h}{m_h-1} \left( \sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h} \right) \right]$$

in which

$$z_{hi} = y_{hi} - r \cdot x_{hi}, \text{ and } z_h = y_h - r \cdot x_h$$

where  $h$  represents the stratum which varies from 1 to  $H$ ,  
 $m_h$  is the total number of clusters selected in the  $h^{\text{th}}$  stratum,  
 $y_{hi}$  is the weighted sum of the values of variable  $y$  in the  $i^{\text{th}}$  cluster in the  $h^{\text{th}}$  stratum,



$x_{hi}$  is the weighted sum of the number of cases in the  $i^{\text{th}}$  cluster in the  $h^{\text{th}}$  stratum, and  
 $f$  is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers *all but one* clusters in the calculation of the estimates. Pseudo-independent replications are thus created. In the 1997 IDHS, there were 1,413 non-empty clusters. Hence, 1,413 replications were created. The variance of a rate  $r$  is calculated as follows:

$$\text{var}_f(r) = \frac{1}{k(k-1)} \sum_{i=1}^k (r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where  $r$  is the estimate computed from the full sample of 1,413 clusters,  
 $r_{(i)}$  is the estimate computed from the reduced sample of 1,412 clusters ( $i^{\text{th}}$  cluster excluded),  
and  
 $k$  is the total number of clusters.

In addition to the standard error, ISSA computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. ISSA also computes the relative error and confidence limits for the estimates.

Sampling errors for the 1997 IDHS are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and rural areas, for three survey regions (Java-Bali, Outer Java-Bali I, and Outer Java-Bali II), and for each of the 29 provinces. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 to B.35 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits ( $R \pm 2SE$ ), for each variable. The DEFT is considered undefined when the standard error considering simple random sample is zero (when the estimate is close to 0 or 1). In the case of the total fertility rate, the number of unweighted cases is not relevant, as there is no known unweighted value for woman-years of exposure to child-bearing.

The confidence interval (e.g., as calculated for *children ever born to currently married women age 15-49*) can be interpreted as follows: the overall average from the national sample is 2.817 and its standard error is 0.025. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e.,  $2.817 \pm 2 \times 0.025$ . There is a high probability (95 percent) that the *true* average number of children ever born to all currently married women age 15 to 49 is between 2.768 and 2.866.

Sampling errors are analyzed for the national sample and for two separate groups of estimates: (1) means and proportions, and (2) complex demographic rates. The relative standard errors (SE/R) for the means and proportions range between 0.2 percent and 19.4 percent with an average of 3.4 percent; the highest relative standard errors are for estimates of very low values (e.g., *currently using condoms*). It

should be noted that at the provincial level, sampling errors of some variables should be used with caution. For estimates based on a small number of cases, the relative error is quite large. For example, in the province of Lampung, the proportion of children with diarrhea in the last 2 weeks who were medically treated is 63.3 percent and is based on 47 cases. The relative error for this estimate is 46 percent.

If estimates of very low values (less than 10 percent) were removed, then the average would drop to 2 percent. So in general, the relative standard errors for most estimates for the country as a whole is small, except for estimates of very small proportions. The relative standard error for the total fertility rate is small, 1.9 percent. However, for the mortality rates, the average relative standard error is much higher, 7.3 percent.

There are differentials in the relative standard error for the estimates of sub-populations. For example, for the variable *with secondary education or higher*, the relative standard errors as a percent of the estimated mean for the whole country, for the rural areas, and for East Timor are 2.3 percent, 3.6 percent, and 13.1 percent, respectively.

For the total sample, the value of the design effect (DEFT), averaged over all variables, is 2.05 which means that, due to multi-stage clustering of the sample, standard deviation increased by a factor of 2.05 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, Indonesia 1997

Variable	Estimate	Base Population
Urban residence	Proportion	Ever-married women 15-49
No education	Proportion	Ever-married women 15-49
With secondary education or higher	Proportion	Ever-married women 15-49
Currently married	Proportion	Ever-married women 15-49
Married before age 20	Proportion	Ever-married women 15-49
Had first sexual intercourse before 18	Proportion	Ever-married women 15-49
Children ever born	Mean	Currently married women 15-49
Children ever born to women over 40	Mean	Currently married women aged 40-49
Children surviving	Mean	Currently married women 15-49
Knowing any contraceptive method	Proportion	Currently married women 15-49
Knowing any modern contraceptive method	Proportion	Currently married women 15-49
Ever used any contraceptive method	Proportion	Currently married women 15-49
Currently using any method	Proportion	Currently married women 15-49
Currently using a modern method	Proportion	Currently married women 15-49
Currently using pill	Proportion	Currently married women 15-49
Currently using IUD	Proportion	Currently married women 15-49
Currently using injection	Proportion	Currently married women 15-49
Currently using implants	Proportion	Currently married women 15-49
Currently using condom	Proportion	Currently married women 15-49
Currently using female sterilization	Proportion	Currently married women 15-49
Currently using male sterilization	Proportion	Currently married women 15-49
Currently using periodic abstinence	Proportion	Currently married women 15-49
Currently using withdrawal	Proportion	Currently married women 15-49
Using public sector source	Proportion	Current users of modern method
Want no more children	Proportion	Currently married women 15-49
Want to delay at least 2 years	Proportion	Currently married women 15-49
Ideal number of children	Mean	Ever-married women 15-49
Mothers received tetanus injection	Proportion	Births in last 5 years
Mothers received medical care at birth	Proportion	Births in last 5 years
Had diarrhea in the last 2 weeks	Proportion	Children under 5
Treated with ORS packets	Proportion	Children under 5 with diarrhea in last 2 weeks
Sought medical treatment	Proportion	Children under 5 with diarrhea in last 2 weeks
Having health card	Proportion	Children 12-23 months
Received BCG vaccination	Proportion	Children 12-23 months
Received DPT vaccination (3 doses)	Proportion	Children 12-23 months
Received polio vaccination (3 doses)	Proportion	Children 12-23 months
Received measles vaccination	Proportion	Children 12-23 months
Fully immunized	Proportion	Children 12-23 months
Total fertility rate (3 years)	Rate	Women-years of exposure to child-bearing
Neonatal mortality rate (0-9 years) <sup>1</sup>	Rate	Number of births
Infant mortality rate (0-9 years) <sup>1</sup>	Rate	Number of births
Child mortality rate (0-9 years) <sup>1</sup>	Rate	Number of births
Under five mortality rate (0-9 years) <sup>1</sup>	Rate	Number of births
Postneonatal mortality rate (0-9 years) <sup>1</sup>	Rate	Number of births

<sup>1</sup> For the total country is based in the period (0-4 years)



Table B.2.1 Sampling errors - National sample, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.279	0.004	28810	28810	1.596	0.015	0.270	0.287
No education	0.132	0.005	28810	28810	2.566	0.039	0.122	0.142
With secondary education or higher	0.281	0.007	28810	28810	2.459	0.023	0.268	0.294
Currently married	0.933	0.002	28810	28810	1.501	0.002	0.929	0.938
Married before age 20	0.671	0.005	27707	27500	1.903	0.008	0.660	0.682
Had first sexual intercourse before 18	0.468	0.006	27707	27500	1.954	0.013	0.457	0.480
Children ever born	2.817	0.025	26833	26886	1.897	0.009	2.768	2.866
Children ever born to women over 40	4.494	0.054	6438	6459	1.751	0.012	4.385	4.603
Children surviving	2.529	0.021	26833	26886	1.875	0.008	2.487	2.571
Knowing any contraceptive method	0.972	0.002	26833	26886	2.277	0.002	0.967	0.976
Knowing any modern contraceptive method	0.970	0.002	26833	26886	2.232	0.002	0.965	0.974
Ever used any contraceptive method	0.778	0.005	26833	26886	2.003	0.007	0.768	0.789
Currently using any method	0.574	0.006	26833	26886	2.058	0.011	0.562	0.587
Currently using a modern method	0.547	0.006	26833	26886	2.055	0.011	0.535	0.560
Currently using pill	0.154	0.005	26833	26886	2.155	0.031	0.145	0.164
Currently using IUD	0.081	0.004	26833	26886	2.505	0.051	0.073	0.090
Currently using injection	0.212	0.007	26833	26886	2.622	0.031	0.198	0.225
Currently using implants	0.060	0.004	26833	26886	2.815	0.068	0.051	0.068
Currently using condom	0.007	0.001	26833	26886	1.483	0.111	0.005	0.008
Currently using female sterilization	0.030	0.002	26833	26886	1.694	0.059	0.026	0.033
Currently using male sterilization	0.004	0.001	26833	26886	1.960	0.194	0.002	0.005
Currently using periodic abstinence	0.011	0.001	26833	26886	1.404	0.081	0.009	0.013
Currently using withdrawal	0.008	0.001	26833	26886	1.739	0.117	0.006	0.010
Using public sector source	0.430	0.010	13862	14742	2.429	0.024	0.409	0.450
Want no more children	0.463	0.005	26833	26886	1.568	0.010	0.453	0.472
Want to delay at least 2 years	0.253	0.004	26833	26886	1.541	0.016	0.245	0.261
Ideal number of children	2.913	0.017	22245	22904	1.996	0.006	2.879	2.947
Mothers received tetanus injection	0.719	0.010	17444	16217	2.358	0.014	0.699	0.738
Mothers received medical care at birth	0.491	0.011	17444	16217	2.500	0.023	0.469	0.514
Had diarrhea in the last 2 weeks	0.104	0.004	16544	15433	1.683	0.041	0.095	0.112
Treated with ORS packets	0.477	0.021	1727	1603	1.593	0.043	0.436	0.518
Sought medical treatment	0.542	0.021	1727	1603	1.586	0.038	0.501	0.584
Having health card	0.309	0.014	3329	3088	1.715	0.046	0.280	0.338
Received BCG vaccination	0.849	0.011	3329	3088	1.756	0.013	0.827	0.872
Received DPT vaccination (3 doses)	0.641	0.015	3329	3088	1.684	0.023	0.612	0.670
Received polio vaccination (3 doses)	0.736	0.014	3329	3088	1.704	0.018	0.709	0.763
Received measles vaccination	0.709	0.014	3329	3088	1.660	0.019	0.681	0.736
Fully immunized	0.548	0.014	3329	3088	1.583	0.026	0.519	0.576
Total fertility rate (3 years)	2.784	0.053	NA	108586	2.078	0.019	2.678	2.889
Neonatal mortality rate (0-4 years)	21.796	1.735	17794	16517	1.416	0.080	18.327	25.266
Infant mortality rate (0-4 years)	45.733	2.777	17822	16542	1.566	0.061	40.180	51.286
Child mortality rate (0-4 years)	13.093	1.208	17908	16618	1.385	0.092	10.676	15.509
Under-five mortality rate (0-4 years)	58.227	3.058	17940	16645	1.579	0.053	52.111	64.342
Postneonatal mortality rate (0-4 years)	23.936	1.920	17818	16541	1.505	0.080	20.097	27.776

NA = Not applicable

Table B.2.2 Sampling errors - Urban sample, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	1.000	0.000	8117	8033	NA	0.000	1.000	1.000
No education	0.050	0.006	8117	8033	2.551	0.124	0.038	0.062
With secondary education or higher	0.506	0.015	8117	8033	2.707	0.030	0.475	0.536
Currently married	0.925	0.005	8117	8033	1.540	0.005	0.916	0.934
Married before age 20	0.533	0.011	7948	7847	2.017	0.021	0.511	0.556
Had first sexual intercourse before 18	0.334	0.010	7948	7847	1.934	0.031	0.314	0.355
Children ever born	2.703	0.035	7529	7428	1.521	0.013	2.634	2.773
Children ever born to women over 40	4.208	0.087	1878	1939	1.647	0.021	4.034	4.381
Children surviving	2.498	0.030	7529	7428	1.498	0.012	2.437	2.558
Knowing any contraceptive method	0.992	0.002	7529	7428	1.771	0.002	0.988	0.996
Knowing any modern contraceptive method	0.991	0.002	7529	7428	1.728	0.002	0.987	0.995
Ever used any contraceptive method	0.808	0.007	7529	7428	1.599	0.009	0.794	0.823
Currently using any method	0.598	0.011	7529	7428	1.951	0.018	0.576	0.620
Currently using a modern method	0.552	0.010	7529	7428	1.828	0.019	0.531	0.573
Currently using pill	0.150	0.008	7529	7428	1.862	0.051	0.134	0.165
Currently using IUD	0.102	0.006	7529	7428	1.768	0.060	0.090	0.114
Currently using injection	0.210	0.009	7529	7428	1.991	0.044	0.192	0.229
Currently using implants	0.021	0.004	7529	7428	2.187	0.172	0.014	0.028
Currently using condom	0.018	0.002	7529	7428	1.528	0.129	0.014	0.023
Currently using female sterilization	0.050	0.004	7529	7428	1.639	0.083	0.042	0.058
Currently using male sterilization	0.001	0.000	7529	7428	1.407	0.532	0.000	0.002
Currently using periodic abstinence	0.024	0.003	7529	7428	1.528	0.114	0.018	0.029
Currently using withdrawal	0.014	0.003	7529	7428	1.874	0.183	0.009	0.019
Using public sector source	0.310	0.014	4073	4122	1.900	0.044	0.282	0.337
Want no more children	0.483	0.009	7529	7428	1.570	0.019	0.465	0.501
Want to delay at least 2 years	0.236	0.009	7529	7428	1.772	0.037	0.219	0.254
Ideal number of children	2.794	0.024	6682	6585	1.775	0.009	2.745	2.842
Mothers received tetanus injection	0.805	0.013	4585	4373	1.896	0.016	0.779	0.831
Mothers received medical care at birth	0.794	0.024	4585	4373	3.382	0.030	0.746	0.841
Had diarrhea in the last 2 weeks	0.091	0.006	4427	4223	1.431	0.070	0.078	0.104
Treated with ORS packets	0.442	0.033	389	384	1.283	0.074	0.376	0.507
Sought medical treatment	0.514	0.046	389	384	1.761	0.089	0.423	0.606
Having health card	0.375	0.025	950	927	1.542	0.065	0.326	0.424
Received BCG vaccination	0.926	0.016	950	927	1.904	0.018	0.894	0.959
Received DPT vaccination (3 doses)	0.752	0.023	950	927	1.603	0.030	0.707	0.797
Received polio vaccination (3 doses)	0.849	0.018	950	927	1.561	0.021	0.813	0.886
Received measles vaccination	0.792	0.020	950	927	1.461	0.025	0.753	0.832
Fully immunized	0.658	0.023	950	927	1.474	0.035	0.612	0.705
Total fertility rate (3 years)	2.400	0.074	NA	35173	1.818	0.031	2.252	2.547
Neonatal mortality rate (0-9 years)	19.180	2.274	9155	8583	1.371	0.119	14.633	23.727
Infant mortality rate (0-9 years)	35.733	3.271	9159	8585	1.456	0.092	29.191	42.274
Child mortality rate (0-9 years)	12.331	1.795	9189	8623	1.458	0.146	8.742	15.921
Under-five mortality rate (0-9 years)	47.623	3.862	9194	8625	1.457	0.081	39.899	55.347
Postneonatal mortality rate (0-9 years)	16.553	2.173	9158	8585	1.482	0.131	12.207	20.898

NA = Not applicable



Table B.2.3 Sampling errors - Rural sample, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.000	0.000	20693	20777	NA	NA	0.000	0.000
No education	0.164	0.007	20693	20777	2.571	0.040	0.151	0.177
With secondary education or higher	0.194	0.007	20693	20777	2.530	0.036	0.180	0.208
Currently married	0.937	0.003	20693	20777	1.486	0.003	0.931	0.942
Married before age 20	0.726	0.006	19759	19653	1.882	0.008	0.714	0.738
Had first sexual intercourse before 18	0.522	0.007	19759	19653	2.007	0.014	0.508	0.536
Children ever born	2.861	0.031	19304	19457	1.997	0.011	2.798	2.923
Children ever born to women over 40	4.617	0.068	4560	4519	1.780	0.015	4.482	4.752
Children surviving	2.541	0.026	19304	19457	1.985	0.010	2.488	2.594
Knowing any contraceptive method	0.964	0.003	19304	19457	2.313	0.003	0.958	0.970
Knowing any modern contraceptive method	0.961	0.003	19304	19457	2.269	0.003	0.955	0.968
Ever used any contraceptive method	0.767	0.006	19304	19457	2.127	0.008	0.754	0.780
Currently using any method	0.565	0.007	19304	19457	2.100	0.013	0.550	0.580
Currently using a modern method	0.545	0.008	19304	19457	2.134	0.014	0.530	0.561
Currently using pill	0.156	0.006	19304	19457	2.249	0.038	0.145	0.168
Currently using IUD	0.074	0.005	19304	19457	2.813	0.072	0.063	0.084
Currently using injection	0.212	0.008	19304	19457	2.821	0.039	0.195	0.229
Currently using implants	0.074	0.005	19304	19457	2.885	0.073	0.063	0.085
Currently using condom	0.002	0.000	19304	19457	1.360	0.208	0.001	0.003
Currently using female sterilization	0.022	0.002	19304	19457	1.756	0.084	0.018	0.026
Currently using male sterilization	0.005	0.001	19304	19457	1.989	0.204	0.003	0.007
Currently using periodic abstinence	0.006	0.001	19304	19457	1.276	0.115	0.005	0.008
Currently using withdrawal	0.006	0.001	19304	19457	1.623	0.151	0.004	0.008
Using public sector source	0.476	0.013	9789	10621	2.596	0.028	0.450	0.502
Want no more children	0.455	0.006	19304	19457	1.572	0.012	0.444	0.467
Want to delay at least 2 years	0.259	0.005	19304	19457	1.454	0.018	0.250	0.268
Ideal number of children	2.961	0.022	15563	16319	2.045	0.007	2.918	3.004
Mothers received tetanus injection	0.687	0.012	12859	11844	2.467	0.018	0.662	0.711
Mothers received medical care at birth	0.380	0.013	12859	11844	2.454	0.033	0.355	0.405
Had diarrhea in the last 2 weeks	0.109	0.005	12117	11211	1.748	0.050	0.098	0.120
Treated with ORS packets	0.488	0.025	1338	1219	1.672	0.051	0.438	0.538
Sought medical treatment	0.551	0.023	1338	1219	1.522	0.041	0.506	0.597
Having health card	0.280	0.017	2379	2161	1.788	0.062	0.246	0.315
Received BCG vaccination	0.816	0.014	2379	2161	1.730	0.018	0.787	0.845
Received DPT vaccination (3 doses)	0.594	0.018	2379	2161	1.686	0.030	0.558	0.629
Received polio vaccination (3 doses)	0.688	0.017	2379	2161	1.709	0.025	0.654	0.722
Received measles vaccination	0.673	0.017	2379	2161	1.705	0.026	0.638	0.707
Fully immunized	0.500	0.017	2379	2161	1.590	0.034	0.466	0.535
Total fertility rate (3 years)	2.977	0.069	NA	73411	2.143	0.023	2.839	3.116
Neonatal mortality rate (0-9 years)	27.085	1.697	27155	24697	1.478	0.063	23.691	30.479
Infant mortality rate (0-9 years)	57.960	2.697	27223	24770	1.582	0.047	52.566	63.354
Child mortality rate (0-9 years)	21.814	1.524	27313	24837	1.515	0.070	18.767	24.861
Under-five mortality rate (0-9 years)	78.510	3.110	27384	24911	1.590	0.040	72.290	84.729
Postneonatal mortality rate (0-9 years)	30.875	1.825	27220	24768	1.492	0.059	27.224	34.525

NA = Not applicable



Table B.2.4 Sampling errors - Java-Bali, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.317	0.006	8735	18039	1.208	0.019	0.305	0.329
No education	0.138	0.008	8735	18039	2.049	0.055	0.122	0.153
With secondary education or higher	0.246	0.009	8735	18039	2.002	0.038	0.228	0.264
Currently married	0.936	0.003	8735	18039	1.227	0.003	0.930	0.943
Married before age 20	0.705	0.008	8401	17147	1.578	0.011	0.690	0.721
Had first sexual intercourse before 18	0.506	0.009	8401	17147	1.600	0.017	0.488	0.523
Children ever born	2.572	0.036	8168	16888	1.676	0.014	2.500	2.644
Children ever born to women over 40	4.020	0.079	2102	4056	1.562	0.020	3.861	4.179
Children surviving	2.315	0.031	8168	16888	1.667	0.013	2.253	2.376
Knowing any contraceptive method	0.983	0.003	8168	16888	1.867	0.003	0.978	0.988
Knowing any modern contraceptive method	0.981	0.003	8168	16888	1.821	0.003	0.976	0.987
Ever used any contraceptive method	0.820	0.007	8168	16888	1.668	0.009	0.806	0.835
Currently using any method	0.606	0.009	8168	16888	1.695	0.015	0.588	0.625
Currently using a modern method	0.585	0.009	8168	16888	1.700	0.016	0.566	0.603
Currently using pill	0.143	0.007	8168	16888	1.776	0.048	0.129	0.157
Currently using IUD	0.102	0.007	8168	16888	1.950	0.064	0.088	0.115
Currently using injection	0.235	0.010	8168	16888	2.144	0.043	0.215	0.255
Currently using implants	0.063	0.006	8168	16888	2.320	0.099	0.050	0.075
Currently using condom	0.007	0.001	8168	16888	1.168	0.151	0.005	0.009
Currently using female sterilization	0.031	0.003	8168	16888	1.333	0.082	0.026	0.036
Currently using male sterilization	0.005	0.001	8168	16888	1.523	0.250	0.002	0.007
Currently using periodic abstinence	0.009	0.001	8168	16888	1.138	0.129	0.007	0.012
Currently using withdrawal	0.007	0.001	8168	16888	1.518	0.202	0.004	0.010
Using public sector source	0.401	0.015	4842	9892	2.059	0.036	0.372	0.430
Want no more children	0.474	0.007	8168	16888	1.274	0.015	0.460	0.488
Want to delay at least 2 years	0.249	0.006	8168	16888	1.262	0.024	0.237	0.261
Ideal number of children	2.691	0.023	7445	14986	1.820	0.008	2.646	2.737
Mothers received tetanus injection	0.754	0.015	4255	9188	2.057	0.020	0.724	0.785
Mothers received medical care at birth	0.468	0.018	4255	9188	2.107	0.038	0.433	0.504
Had diarrhea in the last 2 weeks	0.102	0.007	4096	8799	1.455	0.069	0.088	0.116
Treated with ORS packets	0.432	0.033	377	894	1.341	0.076	0.367	0.497
Sought medical treatment	0.521	0.034	377	894	1.381	0.066	0.453	0.590
Having health card	0.352	0.023	841	1734	1.418	0.067	0.305	0.398
Received BCG vaccination	0.873	0.016	841	1734	1.380	0.018	0.842	0.905
Received DPT vaccination (3 doses)	0.646	0.023	841	1734	1.389	0.036	0.600	0.692
Received polio vaccination (3 doses)	0.732	0.022	841	1734	1.454	0.030	0.687	0.776
Received measles vaccination	0.716	0.021	841	1734	1.357	0.030	0.673	0.759
Fully immunized	0.549	0.023	841	1734	1.318	0.042	0.503	0.594
Total fertility rate (3 years)	2.566	0.077	NA	66613	1.706	0.030	2.412	2.720
Neonatal mortality rate (0-9 years)	22.890	2.250	8620	18521	1.261	0.098	18.391	27.390
Infant mortality rate (0-9 years)	46.790	3.501	8633	18566	1.365	0.075	39.788	53.792
Child mortality rate (0-9 years)	16.380	1.868	8659	18617	1.312	0.114	12.644	20.115
Under-five mortality rate (0-9 years)	62.403	3.936	8672	18663	1.354	0.063	54.530	70.276
Postneonatal mortality rate (0-9 years)	23.900	2.319	8633	18566	1.313	0.097	19.262	28.538

NA = Not applicable

Table B.2.5 Sampling errors - Outer Java-Bali I, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.215	0.005	10854	7550	1.386	0.025	0.204	0.226
No education	0.118	0.006	10854	7550	1.896	0.050	0.106	0.130
With secondary education or higher	0.342	0.010	10854	7550	2.261	0.030	0.321	0.362
Currently married	0.925	0.003	10854	7550	1.235	0.003	0.919	0.931
Married before age 20	0.625	0.008	10441	7269	1.604	0.012	0.610	0.640
Had first sexual intercourse before 18	0.412	0.007	10441	7269	1.485	0.017	0.398	0.427
Children ever born	3.265	0.034	10001	6983	1.443	0.010	3.197	3.332
Children ever born to women over 40	5.324	0.069	2464	1751	1.368	0.013	5.186	5.462
Children surviving	2.922	0.028	10001	6983	1.412	0.010	2.865	2.979
Knowing any contraceptive method	0.953	0.006	10001	6983	2.714	0.006	0.941	0.964
Knowing any modern contraceptive method	0.949	0.006	10001	6983	2.676	0.006	0.937	0.961
Ever used any contraceptive method	0.707	0.009	10001	6983	1.900	0.012	0.690	0.724
Currently using any method	0.522	0.008	10001	6983	1.626	0.016	0.506	0.539
Currently using a modern method	0.490	0.008	10001	6983	1.550	0.016	0.475	0.506
Currently using pill	0.176	0.006	10001	6983	1.594	0.034	0.164	0.188
Currently using IUD	0.046	0.004	10001	6983	1.695	0.077	0.039	0.054
Currently using injection	0.168	0.005	10001	6983	1.422	0.032	0.157	0.178
Currently using implants	0.060	0.004	10001	6983	1.692	0.067	0.052	0.068
Currently using condom	0.006	0.001	10001	6983	1.227	0.158	0.004	0.008
Currently using female sterilization	0.031	0.003	10001	6983	1.486	0.084	0.025	0.036
Currently using male sterilization	0.003	0.001	10001	6983	1.329	0.259	0.001	0.004
Currently using periodic abstinence	0.013	0.002	10001	6983	1.393	0.122	0.010	0.016
Currently using withdrawal	0.011	0.001	10001	6983	1.302	0.124	0.008	0.014
Using public sector source	0.451	0.012	5037	3433	1.667	0.026	0.428	0.474
Want no more children	0.443	0.006	10001	6983	1.269	0.014	0.430	0.455
Want to delay at least 2 years	0.264	0.005	10001	6983	1.200	0.020	0.254	0.275
Ideal number of children	3.357	0.027	7944	5478	1.624	0.008	3.304	3.410
Mothers received tetanus injection	0.660	0.013	6768	4821	1.958	0.020	0.633	0.686
Mothers received medical care at birth	0.561	0.015	6768	4821	2.121	0.027	0.531	0.592
Had diarrhea in the last 2 weeks	0.103	0.005	6390	4554	1.220	0.047	0.093	0.112
Treated with ORS packets	0.518	0.027	686	468	1.373	0.053	0.463	0.573
Sought medical treatment	0.566	0.022	686	468	1.112	0.039	0.521	0.610
Having health card	0.261	0.016	1335	957	1.346	0.061	0.229	0.293
Received BCG vaccination	0.805	0.018	1335	957	1.672	0.022	0.769	0.841
Received DPT vaccination (3 doses)	0.618	0.019	1335	957	1.428	0.030	0.580	0.655
Received polio vaccination (3 doses)	0.721	0.016	1335	957	1.305	0.022	0.690	0.753
Received measles vaccination	0.677	0.018	1335	957	1.421	0.027	0.641	0.713
Fully immunized	0.527	0.017	1335	957	1.293	0.033	0.492	0.562
Total fertility rate (3 years)	3.099	0.067	NA	29521	1.462	0.022	2.965	3.233
Neonatal mortality rate (0-9 years)	26.766	1.698	14217	10157	1.177	0.063	23.370	30.163
Infant mortality rate (0-9 years)	58.336	3.031	14249	10177	1.372	0.052	52.273	64.398
Child mortality rate (0-9 years)	22.839	1.895	14300	10217	1.415	0.083	19.048	26.630
Under-five mortality rate (0-9 years)	79.842	3.903	14334	10238	1.535	0.049	72.036	87.648
Postneonatal mortality rate (0-9 years)	31.569	2.169	14247	10176	1.337	0.069	27.231	35.908

NA = Not applicable



Table B.2.6 Sampling errors - Outer Java-Bali II, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.213	0.008	9221	3221	1.775	0.036	0.198	0.228
No education	0.135	0.011	9221	3221	3.012	0.079	0.113	0.156
With secondary education or higher	0.333	0.012	9221	3221	2.365	0.035	0.310	0.356
Currently married	0.936	0.004	9221	3221	1.429	0.004	0.929	0.943
Married before age 20	0.588	0.010	8865	3084	1.917	0.017	0.568	0.608
Had first sexual intercourse before 18	0.393	0.011	8865	3084	2.172	0.029	0.371	0.416
Children ever born	3.152	0.037	8664	3014	1.474	0.012	3.079	3.226
Children ever born to women over 40	5.216	0.095	1872	652	1.567	0.018	5.025	5.407
Children surviving	2.818	0.029	8664	3014	1.341	0.010	2.761	2.875
Knowing any contraceptive method	0.954	0.004	8664	3014	1.737	0.004	0.946	0.961
Knowing any modern contraceptive method	0.950	0.004	8664	3014	1.688	0.004	0.942	0.958
Ever used any contraceptive method	0.708	0.007	8664	3014	1.502	0.010	0.694	0.723
Currently using any method	0.514	0.009	8664	3014	1.765	0.018	0.495	0.533
Currently using a modern method	0.470	0.010	8664	3014	1.790	0.020	0.451	0.489
Currently using pill	0.170	0.010	8664	3014	2.565	0.061	0.149	0.190
Currently using IUD	0.050	0.004	8664	3014	1.537	0.072	0.043	0.058
Currently using injection	0.183	0.006	8664	3014	1.432	0.032	0.171	0.195
Currently using implants	0.040	0.003	8664	3014	1.559	0.082	0.033	0.046
Currently using condom	0.005	0.001	8664	3014	1.117	0.168	0.003	0.007
Currently using female sterilization	0.019	0.002	8664	3014	1.308	0.101	0.015	0.023
Currently using male sterilization	0.003	0.001	8664	3014	1.492	0.313	0.001	0.004
Currently using periodic abstinence	0.016	0.002	8664	3014	1.485	0.126	0.012	0.020
Currently using withdrawal	0.009	0.001	8664	3014	1.339	0.155	0.006	0.011
Using public sector source	0.577	0.015	3983	1418	1.895	0.026	0.547	0.606
Want no more children	0.447	0.007	8664	3014	1.263	0.015	0.434	0.461
Want to delay at least 2 years	0.248	0.006	8664	3014	1.278	0.024	0.236	0.260
Ideal number of children	3.280	0.033	6856	2440	1.903	0.010	3.213	3.346
Mothers received tetanus injection	0.698	0.017	6421	2207	2.529	0.025	0.664	0.733
Mothers received medical care at birth	0.435	0.016	6421	2207	2.104	0.036	0.404	0.466
Had diarrhea in the last 2 weeks	0.116	0.006	6058	2080	1.477	0.055	0.103	0.129
Treated with ORS packets	0.563	0.022	664	241	1.124	0.040	0.519	0.608
Sought medical treatment	0.576	0.023	664	241	1.142	0.039	0.530	0.621
Having health card	0.239	0.017	1153	397	1.323	0.070	0.205	0.273
Received BCG vaccination	0.852	0.032	1153	397	2.969	0.037	0.789	0.915
Received DPT vaccination (3 doses)	0.678	0.027	1153	397	1.976	0.041	0.623	0.733
Received polio vaccination (3 doses)	0.791	0.014	1153	397	1.123	0.017	0.763	0.818
Received measles vaccination	0.752	0.029	1153	397	2.219	0.038	0.695	0.809
Fully immunized	0.594	0.026	1153	397	1.762	0.044	0.542	0.646
Total fertility rate (3 years)	3.200	0.068	NA	12687	1.320	0.021	3.063	3.336
Neonatal mortality rate (0-9 years)	29.939	2.589	13473	4602	1.558	0.086	24.762	35.117
Infant mortality rate (0-9 years)	60.666	3.326	13500	4611	1.423	0.055	54.014	67.318
Child mortality rate (0-9 years)	23.924	1.975	13543	4625	1.350	0.083	19.975	27.874
Under-five mortality rate (0-9 years)	83.139	4.018	13572	4635	1.380	0.048	75.102	91.176
Postneonatal mortality rate (0-9 years)	30.727	1.967	13498	4610	1.185	0.064	26.792	34.661

NA = Not applicable



Table B.2.7 Sampling errors - DKI Jakarta, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	1.000	0.000	1784	1152	NA	0.000	1.000	1.000
No education	0.038	0.006	1784	1152	1.241	0.149	0.026	0.049
With secondary education or higher	0.543	0.020	1784	1152	1.680	0.036	0.504	0.583
Currently married	0.908	0.009	1784	1152	1.357	0.010	0.889	0.926
Married before age 20	0.518	0.018	1742	1126	1.476	0.034	0.482	0.553
Had first sexual intercourse before 18	0.343	0.015	1742	1126	1.353	0.045	0.312	0.374
Children ever born	2.621	0.068	1624	1045	1.305	0.026	2.485	2.756
Children ever born to women over 40	4.308	0.160	387	241	1.261	0.037	3.987	4.628
Children surviving	2.412	0.054	1624	1045	1.183	0.022	2.304	2.519
Knowing any contraceptive method	0.999	0.001	1624	1045	0.859	0.001	0.997	1.000
Knowing any modern contraceptive method	0.998	0.001	1624	1045	0.874	0.001	0.996	1.000
Ever used any contraceptive method	0.817	0.010	1624	1045	1.000	0.012	0.798	0.837
Currently using any method	0.589	0.013	1624	1045	1.091	0.023	0.562	0.615
Currently using a modern method	0.539	0.013	1624	1045	1.036	0.024	0.514	0.565
Currently using pill	0.138	0.009	1624	1045	1.102	0.068	0.120	0.157
Currently using IUD	0.108	0.009	1624	1045	1.202	0.086	0.089	0.126
Currently using injection	0.222	0.014	1624	1045	1.318	0.061	0.195	0.249
Currently using implants	0.008	0.002	1624	1045	0.960	0.258	0.004	0.013
Currently using condom	0.020	0.003	1624	1045	0.992	0.174	0.013	0.026
Currently using female sterilization	0.042	0.006	1624	1045	1.151	0.136	0.031	0.054
Currently using male sterilization	0.001	0.001	1624	1045	1.083	0.994	0.000	0.002
Currently using periodic abstinence	0.029	0.004	1624	1045	1.002	0.144	0.020	0.037
Currently using withdrawal	0.009	0.003	1624	1045	1.157	0.295	0.004	0.015
Using public sector source	0.265	0.021	878	566	1.408	0.079	0.223	0.307
Want no more children	0.461	0.017	1624	1045	1.367	0.037	0.427	0.495
Want to delay at least 2 years	0.248	0.011	1624	1045	1.025	0.044	0.226	0.270
Ideal number of children	2.693	0.030	1462	941	1.222	0.011	2.633	2.752
Mothers received tetanus injection	0.789	0.017	886	572	1.124	0.022	0.754	0.823
Mothers received medical care at birth	0.922	0.011	886	572	1.096	0.012	0.900	0.944
Had diarrhea in the last 2 weeks	0.083	0.010	858	555	1.066	0.124	0.062	0.103
Treated with ORS packets	0.398	0.073	68	46	1.280	0.185	0.251	0.545
Sought medical treatment	0.499	0.064	68	46	1.041	0.129	0.371	0.627
Having health card	0.311	0.037	188	121	1.089	0.119	0.237	0.385
Received BCG vaccination	0.943	0.017	188	121	1.014	0.018	0.908	0.977
Received DPT vaccination (3 doses)	0.733	0.034	188	121	1.062	0.047	0.664	0.801
Received polio vaccination (3 doses)	0.824	0.030	188	121	1.084	0.037	0.764	0.884
Received measles vaccination	0.778	0.039	188	121	1.289	0.050	0.700	0.857
Fully immunized	0.607	0.037	188	121	1.031	0.061	0.533	0.680
Total fertility rate (3 years)	2.040	0.087	NA	5289	1.181	0.043	1.866	2.214
Neonatal mortality rate (0-9 years)	16.266	3.455	1802	1165	1.053	0.212	9.356	23.177
Infant mortality rate (0-9 years)	26.098	4.482	1803	1166	1.085	0.172	17.135	35.062
Child mortality rate (0-9 years)	16.049	4.449	1810	1170	1.393	0.277	7.151	24.948
Under-five mortality rate (0-9 years)	41.729	6.024	1811	1171	1.166	0.144	29.680	53.777
Postneonatal mortality rate (0-9 years)	9.832	2.248	1803	1166	0.974	0.229	5.336	14.329

NA = Not applicable

Table B.2.8 Sampling errors - West Java, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.311	0.012	1590	5691	1.018	0.038	0.287	0.334
No education	0.122	0.013	1590	5691	1.548	0.104	0.096	0.147
With secondary education or higher	0.203	0.015	1590	5691	1.497	0.074	0.173	0.233
Currently married	0.951	0.006	1590	5691	1.069	0.006	0.939	0.963
Married before age 20	0.778	0.013	1492	5323	1.189	0.016	0.753	0.804
Had first sexual intercourse before 18	0.591	0.017	1492	5323	1.317	0.028	0.557	0.624
Children ever born	2.887	0.078	1511	5412	1.379	0.027	2.731	3.043
Children ever born to women over 40	4.651	0.189	327	1144	1.259	0.041	4.273	5.029
Children surviving	2.526	0.063	1511	5412	1.348	0.025	2.400	2.653
Knowing any contraceptive method	0.977	0.007	1511	5412	1.883	0.007	0.962	0.991
Knowing any modern contraceptive method	0.977	0.007	1511	5412	1.883	0.007	0.962	0.991
Ever used any contraceptive method	0.812	0.016	1511	5412	1.595	0.020	0.780	0.844
Currently using any method	0.576	0.021	1511	5412	1.659	0.037	0.534	0.618
Currently using a modern method	0.565	0.021	1511	5412	1.642	0.037	0.523	0.607
Currently using pill	0.159	0.011	1511	5412	1.161	0.069	0.137	0.180
Currently using IUD	0.060	0.008	1511	5412	1.245	0.127	0.044	0.075
Currently using injection	0.263	0.022	1511	5412	1.957	0.084	0.218	0.307
Currently using implants	0.055	0.010	1511	5412	1.714	0.183	0.035	0.075
Currently using condom	0.004	0.002	1511	5412	1.012	0.425	0.001	0.007
Currently using female sterilization	0.018	0.004	1511	5412	1.166	0.220	0.010	0.026
Currently using male sterilization	0.007	0.002	1511	5412	0.850	0.268	0.003	0.010
Currently using periodic abstinence	0.008	0.002	1511	5412	1.064	0.314	0.003	0.012
Currently using withdrawal	0.001	0.001	1511	5412	0.993	0.999	0.000	0.002
Using public sector source	0.372	0.027	855	3059	1.617	0.072	0.319	0.426
Want no more children	0.423	0.013	1511	5412	1.061	0.032	0.396	0.450
Want to delay at least 2 years	0.256	0.013	1511	5412	1.131	0.050	0.230	0.281
Ideal number of children	2.944	0.053	1076	3833	1.436	0.018	2.838	3.050
Mothers received tetanus injection	0.705	0.034	917	3351	1.941	0.048	0.637	0.772
Mothers received medical care at birth	0.335	0.030	917	3351	1.712	0.089	0.276	0.395
Had diarrhea in the last 2 weeks	0.127	0.014	862	3146	1.232	0.112	0.098	0.155
Treated with ORS packets	0.381	0.047	108	398	0.990	0.124	0.287	0.475
Sought medical treatment	0.462	0.062	108	398	1.293	0.134	0.339	0.585
Having health card	0.225	0.036	159	561	1.099	0.162	0.152	0.298
Received BCG vaccination	0.787	0.036	159	561	1.090	0.045	0.716	0.859
Received DPT vaccination (3 doses)	0.485	0.043	159	561	1.067	0.088	0.400	0.571
Received polio vaccination (3 doses)	0.662	0.046	159	561	1.224	0.070	0.569	0.754
Received measles vaccination	0.618	0.044	159	561	1.126	0.071	0.531	0.706
Fully immunized	0.424	0.043	159	561	1.070	0.100	0.339	0.510
Total fertility rate (3 years)	3.020	0.181	NA	20563	1.499	0.060	2.658	3.383
Neonatal mortality rate (0-9 years)	29.742	4.474	1908	6915	0.963	0.150	20.795	38.690
Infant mortality rate (0-9 years)	60.614	6.718	1915	6942	1.002	0.111	47.177	74.051
Child mortality rate (0-9 years)	17.675	3.136	1917	6945	1.061	0.177	11.404	23.946
Under-five mortality rate (0-9 years)	77.218	7.150	1924	6972	1.004	0.093	62.918	91.517
Postneonatal mortality rate (0-9 years)	30.872	4.284	1915	6942	0.957	0.139	22.303	39.440

NA = Not applicable



Table B.2.9 Sampling errors - Central Java, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.253	0.010	1482	4634	0.928	0.041	0.232	0.274
No education	0.148	0.015	1482	4634	1.582	0.099	0.119	0.177
With secondary education or higher	0.228	0.023	1482	4634	2.107	0.101	0.182	0.274
Currently married	0.942	0.007	1482	4634	1.166	0.007	0.928	0.957
Married before age 20	0.673	0.017	1426	4461	1.333	0.025	0.640	0.706
Had first sexual intercourse before 18	0.455	0.018	1426	4461	1.368	0.040	0.419	0.491
Children ever born	2.595	0.074	1394	4367	1.463	0.028	2.448	2.742
Children ever born to women over 40	4.093	0.167	351	1099	1.405	0.041	3.760	4.426
Children surviving	2.381	0.062	1394	4367	1.410	0.026	2.257	2.504
Knowing any contraceptive method	0.982	0.004	1394	4367	1.055	0.004	0.974	0.989
Knowing any modern contraceptive method	0.981	0.004	1394	4367	1.055	0.004	0.973	0.989
Ever used any contraceptive method	0.809	0.014	1394	4367	1.323	0.017	0.781	0.837
Currently using any method	0.624	0.016	1394	4367	1.255	0.026	0.592	0.657
Currently using a modern method	0.614	0.016	1394	4367	1.254	0.027	0.581	0.647
Currently using pill	0.111	0.012	1394	4367	1.416	0.107	0.087	0.135
Currently using IUD	0.087	0.013	1394	4367	1.768	0.153	0.060	0.114
Currently using injection	0.254	0.019	1394	4367	1.643	0.075	0.216	0.292
Currently using implants	0.112	0.017	1394	4367	2.024	0.153	0.078	0.146
Currently using condom	0.010	0.003	1394	4367	1.032	0.281	0.004	0.015
Currently using female sterilization	0.035	0.005	1394	4367	1.020	0.145	0.025	0.045
Currently using male sterilization	0.006	0.003	1394	4367	1.598	0.575	0.000	0.012
Currently using periodic abstinence	0.006	0.002	1394	4367	1.096	0.392	0.001	0.010
Currently using withdrawal	0.004	0.002	1394	4367	1.021	0.424	0.001	0.008
Using public sector source	0.461	0.028	851	2684	1.632	0.061	0.405	0.517
Want no more children	0.488	0.014	1394	4367	1.070	0.029	0.459	0.516
Want to delay at least 2 years	0.237	0.014	1394	4367	1.249	0.060	0.209	0.266
Ideal number of children	2.707	0.046	1255	3916	1.654	0.017	2.614	2.799
Mothers received tetanus injection	0.800	0.022	757	2385	1.350	0.027	0.757	0.843
Mothers received medical care at birth	0.470	0.038	757	2385	1.887	0.082	0.393	0.547
Had diarrhea in the last 2 weeks	0.084	0.013	731	2306	1.175	0.150	0.059	0.109
Treated with ORS packets	0.498	0.091	60	193	1.347	0.182	0.317	0.679
Sought medical treatment	0.504	0.052	60	193	0.771	0.103	0.400	0.608
Having health card	0.382	0.045	152	476	1.126	0.117	0.293	0.471
Received BCG vaccination	0.923	0.025	152	476	1.189	0.028	0.872	0.974
Received DPT vaccination (3 doses)	0.681	0.043	152	476	1.142	0.063	0.596	0.767
Received polio vaccination (3 doses)	0.681	0.040	152	476	1.076	0.059	0.600	0.762
Received measles vaccination	0.707	0.042	152	476	1.118	0.059	0.624	0.791
Fully immunized	0.512	0.042	152	476	1.035	0.082	0.427	0.596
Total fertility rate (3 years)	2.634	0.144	NA	16994	1.333	0.055	2.346	2.922
Neonatal mortality rate (0-9 years)	23.429	4.345	1557	4888	1.066	0.185	14.739	32.119
Infant mortality rate (0-9 years)	45.226	6.283	1557	4888	1.105	0.139	32.660	57.791
Child mortality rate (0-9 years)	15.352	3.950	1564	4911	1.164	0.257	7.452	23.252
Under-five mortality rate (0-9 years)	59.883	6.819	1564	4911	1.035	0.114	46.245	73.521
Postneonatal mortality rate (0-9 years)	21.797	4.599	1557	4888	1.154	0.211	12.599	30.994

NA = Not applicable



Table B.2.10 Sampling errors - DI Yogyakarta, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.425	0.016	1063	439	1.070	0.038	0.392	0.457
No education	0.102	0.017	1063	439	1.784	0.163	0.069	0.135
With secondary education or higher	0.453	0.026	1063	439	1.710	0.058	0.401	0.505
Currently married	0.938	0.007	1063	439	0.999	0.008	0.923	0.953
Married before age 20	0.485	0.022	1046	432	1.399	0.045	0.442	0.529
Had first sexual intercourse before 18	0.254	0.016	1046	432	1.224	0.065	0.221	0.286
Children ever born	2.372	0.054	998	412	1.091	0.023	2.264	2.480
Children ever born to women over 40	3.464	0.110	328	133	1.151	0.032	3.244	3.683
Children surviving	2.242	0.053	998	412	1.135	0.024	2.136	2.348
Knowing any contraceptive method	0.999	0.001	998	412	0.944	0.001	0.997	1.000
Knowing any modern contraceptive method	0.999	0.001	998	412	0.944	0.001	0.997	1.000
Ever used any contraceptive method	0.893	0.008	998	412	0.829	0.009	0.877	0.909
Currently using any method	0.729	0.017	998	412	1.197	0.023	0.695	0.763
Currently using a modern method	0.637	0.018	998	412	1.156	0.028	0.602	0.673
Currently using pill	0.105	0.012	998	412	1.230	0.114	0.081	0.129
Currently using IUD	0.233	0.015	998	412	1.109	0.064	0.204	0.263
Currently using injection	0.195	0.017	998	412	1.390	0.089	0.160	0.230
Currently using implants	0.025	0.007	998	412	1.425	0.280	0.011	0.039
Currently using condom	0.024	0.005	998	412	1.138	0.231	0.013	0.035
Currently using female sterilization	0.046	0.006	998	412	0.929	0.134	0.034	0.059
Currently using male sterilization	0.005	0.004	998	412	1.540	0.659	0.000	0.013
Currently using periodic abstinence	0.034	0.007	998	412	1.208	0.205	0.020	0.047
Currently using withdrawal	0.043	0.008	998	412	1.283	0.192	0.026	0.059
Using public sector source	0.470	0.026	640	263	1.328	0.056	0.418	0.522
Want no more children	0.572	0.019	998	412	1.189	0.033	0.535	0.609
Want to delay at least 2 years	0.236	0.014	998	412	1.053	0.060	0.208	0.264
Ideal number of children	2.383	0.030	1016	420	1.430	0.013	2.323	2.444
Mothers received tetanus injection	0.887	0.017	433	181	1.031	0.019	0.853	0.921
Mothers received medical care at birth	0.700	0.042	433	181	1.731	0.060	0.617	0.784
Had diarrhea in the last 2 weeks	0.067	0.011	424	177	0.858	0.161	0.045	0.088
Treated with ORS packets	0.457	0.080	28	12	0.905	0.176	0.297	0.618
Sought medical treatment	0.654	0.088	28	12	0.965	0.134	0.479	0.830
Having health card	0.580	0.047	79	33	0.844	0.080	0.487	0.673
Received BCG vaccination	0.989	0.011	79	33	0.935	0.011	0.967	1.000
Received DPT vaccination (3 doses)	0.900	0.032	79	33	0.950	0.035	0.836	0.963
Received polio vaccination (3 doses)	0.920	0.032	79	33	1.066	0.035	0.855	0.985
Received measles vaccination	0.963	0.020	79	33	0.969	0.021	0.922	1.000
Fully immunized	0.873	0.041	79	33	1.104	0.047	0.790	0.955
Total fertility rate (3 years)	1.846	0.114	NA	1950	1.088	0.062	1.617	2.075
Neonatal mortality rate (0-9 years)	10.649	3.254	893	369	0.951	0.306	4.142	17.156
Infant mortality rate (0-9 years)	23.396	4.493	893	369	0.862	0.192	14.410	32.381
Child mortality rate (0-9 years)	7.026	2.517	896	371	0.939	0.358	1.992	12.059
Under-five mortality rate (0-9 years)	30.257	5.368	896	371	0.887	0.177	19.521	40.993
Postneonatal mortality rate (0-9 years)	12.747	3.269	893	369	0.881	0.256	6.209	19.285

NA = Not applicable

Table B.2.11 Sampling errors - East Java, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.236	0.011	1530	5681	0.968	0.045	0.215	0.257
No education	0.163	0.016	1530	5681	1.738	0.101	0.130	0.195
With secondary education or higher	0.224	0.015	1530	5681	1.440	0.069	0.193	0.255
Currently married	0.920	0.006	1530	5681	0.821	0.006	0.909	0.932
Married before age 20	0.732	0.016	1448	5377	1.337	0.021	0.701	0.763
Had first sexual intercourse before 18	0.535	0.016	1448	5377	1.212	0.030	0.504	0.567
Children ever born	2.244	0.050	1406	5227	1.129	0.022	2.144	2.343
Children ever born to women over 40	3.448	0.105	354	1318	1.014	0.030	3.238	3.658
Children surviving	2.032	0.048	1406	5227	1.236	0.024	1.935	2.128
Knowing any contraceptive method	0.986	0.003	1406	5227	0.860	0.003	0.980	0.991
Knowing any modern contraceptive method	0.982	0.003	1406	5227	0.857	0.003	0.975	0.988
Ever used any contraceptive method	0.830	0.010	1406	5227	1.043	0.013	0.809	0.850
Currently using any method	0.611	0.014	1406	5227	1.087	0.023	0.583	0.639
Currently using a modern method	0.580	0.015	1406	5227	1.139	0.026	0.550	0.610
Currently using pill	0.164	0.016	1406	5227	1.612	0.097	0.132	0.195
Currently using IUD	0.126	0.016	1406	5227	1.769	0.124	0.095	0.157
Currently using injection	0.201	0.016	1406	5227	1.479	0.079	0.169	0.232
Currently using implants	0.048	0.009	1406	5227	1.628	0.194	0.029	0.066
Currently using condom	0.005	0.002	1406	5227	1.048	0.388	0.001	0.009
Currently using female sterilization	0.034	0.006	1406	5227	1.147	0.162	0.023	0.045
Currently using male sterilization	0.002	0.002	1406	5227	1.338	0.757	0.000	0.006
Currently using periodic abstinence	0.008	0.002	1406	5227	0.904	0.263	0.004	0.013
Currently using withdrawal	0.013	0.004	1406	5227	1.366	0.322	0.005	0.021
Using public sector source	0.388	0.029	814	3037	1.698	0.075	0.330	0.446
Want no more children	0.505	0.013	1406	5227	0.947	0.025	0.480	0.530
Want to delay at least 2 years	0.259	0.008	1406	5227	0.645	0.029	0.244	0.274
Ideal number of children	2.550	0.036	1470	5473	1.285	0.014	2.477	2.622
Mothers received tetanus injection	0.748	0.021	676	2497	1.152	0.028	0.706	0.790
Mothers received medical care at birth	0.498	0.031	676	2497	1.431	0.062	0.437	0.559
Had diarrhea in the last 2 weeks	0.094	0.012	654	2420	0.977	0.125	0.071	0.118
Treated with ORS packets	0.467	0.058	63	228	0.915	0.125	0.351	0.584
Sought medical treatment	0.630	0.067	63	228	1.027	0.106	0.496	0.763
Having health card	0.443	0.051	137	500	1.169	0.115	0.341	0.545
Received BCG vaccination	0.892	0.024	137	500	0.907	0.027	0.843	0.941
Received DPT vaccination (3 doses)	0.741	0.040	137	500	1.056	0.054	0.661	0.821
Received polio vaccination (3 doses)	0.818	0.037	137	500	1.111	0.045	0.744	0.893
Received measles vaccination	0.795	0.032	137	500	0.880	0.040	0.731	0.858
Fully immunized	0.674	0.043	137	500	1.045	0.064	0.588	0.760
Total fertility rate (3 years)	2.333	0.115	NA	20084	1.076	0.049	2.102	2.564
Neonatal mortality rate (0-9 years)	14.615	3.221	1290	4784	0.944	0.220	8.173	21.057
Infant mortality rate (0-9 years)	35.814	5.959	1295	4802	1.116	0.166	23.896	47.732
Child mortality rate (0-9 years)	17.355	3.905	1300	4821	0.940	0.225	9.545	25.165
Under-five mortality rate (0-9 years)	52.548	8.013	1305	4839	1.145	0.152	36.521	68.574
Postneonatal mortality rate (0-9 years)	21.199	4.206	1295	4802	1.012	0.198	12.787	29.612

NA = Not applicable



Table B.2.12 Sampling errors - Bali, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.233	0.016	1286	442	1.353	0.069	0.201	0.264
No education	0.209	0.020	1286	442	1.749	0.095	0.169	0.249
With secondary education or higher	0.285	0.020	1286	442	1.615	0.071	0.244	0.326
Currently married	0.960	0.007	1286	442	1.207	0.007	0.946	0.973
Married before age 20	0.504	0.018	1247	429	1.238	0.035	0.469	0.539
Had first sexual intercourse before 18	0.280	0.020	1247	429	1.591	0.072	0.240	0.321
Children ever born	2.451	0.041	1235	425	0.868	0.017	2.369	2.534
Children ever born to women over 40	3.643	0.089	355	121	0.926	0.024	3.464	3.821
Children surviving	2.261	0.040	1235	425	0.948	0.018	2.181	2.341
Knowing any contraceptive method	0.983	0.008	1235	425	2.265	0.009	0.966	0.999
Knowing any modern contraceptive method	0.983	0.008	1235	425	2.265	0.009	0.966	0.999
Ever used any contraceptive method	0.863	0.014	1235	425	1.458	0.017	0.834	0.891
Currently using any method	0.681	0.017	1235	425	1.309	0.026	0.646	0.716
Currently using a modern method	0.661	0.018	1235	425	1.319	0.027	0.626	0.697
Currently using pill	0.056	0.010	1235	425	1.570	0.183	0.036	0.077
Currently using IUD	0.339	0.024	1235	425	1.801	0.072	0.290	0.387
Currently using injection	0.169	0.014	1235	425	1.322	0.083	0.141	0.198
Currently using implants	0.006	0.003	1235	425	1.222	0.438	0.001	0.012
Currently using condom	0.007	0.002	1235	425	0.987	0.342	0.002	0.011
Currently using female sterilization	0.080	0.009	1235	425	1.116	0.108	0.062	0.097
Currently using male sterilization	0.004	0.002	1235	425	1.045	0.459	0.000	0.008
Currently using periodic abstinence	0.014	0.004	1235	425	1.120	0.266	0.007	0.022
Currently using withdrawal	0.003	0.002	1235	425	1.409	0.785	0.000	0.007
Using public sector source	0.492	0.028	804	282	1.571	0.056	0.437	0.548
Want no more children	0.553	0.018	1235	425	1.267	0.032	0.518	0.589
Want to delay at least 2 years	0.180	0.015	1235	425	1.358	0.083	0.150	0.209
Ideal number of children	2.378	0.030	1166	403	1.374	0.013	2.317	2.438
Mothers received tetanus injection	0.913	0.018	586	202	1.387	0.019	0.878	0.948
Mothers received medical care at birth	0.781	0.044	586	202	2.159	0.056	0.693	0.869
Had diarrhea in the last 2 weeks	0.085	0.015	567	196	1.285	0.176	0.055	0.114
Treated with ORS packets	0.484	0.065	50	17	0.905	0.135	0.354	0.614
Sought medical treatment	0.633	0.055	50	17	0.787	0.086	0.524	0.743
Having health card	0.554	0.054	126	42	1.209	0.098	0.445	0.663
Received BCG vaccination	0.945	0.031	126	42	1.493	0.033	0.884	1.000
Received DPT vaccination (3 doses)	0.804	0.047	126	42	1.311	0.059	0.710	0.899
Received polio vaccination (3 doses)	0.808	0.046	126	42	1.293	0.057	0.715	0.900
Received measles vaccination	0.816	0.043	126	42	1.231	0.053	0.730	0.902
Fully immunized	0.711	0.055	126	42	1.337	0.077	0.601	0.821
Total fertility rate (3 years)	2.121	0.107	NA	1754	1.147	0.050	1.907	2.334
Neonatal mortality rate (0-9 years)	27.524	5.639	1170	399	1.047	0.205	16.246	38.802
Infant mortality rate (0-9 years)	39.494	7.344	1170	399	1.164	0.186	24.806	54.183
Child mortality rate (0-9 years)	4.736	1.905	1172	400	1.024	0.402	0.926	8.546
Under-five mortality rate (0-9 years)	44.044	7.878	1172	400	1.132	0.179	28.287	59.800
Postneonatal mortality rate (0-9 years)	11.970	4.100	1170	399	1.216	0.343	3.769	20.171

NA = Not applicable



Table B.2.13 Sampling errors - Dista Aceh, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.129	0.009	1147	570	0.937	0.072	0.111	0.148
No education	0.137	0.014	1147	570	1.402	0.104	0.109	0.166
With secondary education or higher	0.347	0.025	1147	570	1.779	0.072	0.297	0.397
Currently married	0.907	0.008	1147	570	0.938	0.009	0.891	0.923
Married before age 20	0.690	0.020	1097	543	1.401	0.028	0.651	0.729
Had first sexual intercourse before 18	0.471	0.021	1097	543	1.371	0.044	0.429	0.512
Children ever born	3.161	0.073	1035	517	1.049	0.023	3.016	3.307
Children ever born to women over 40	5.001	0.147	260	128	1.012	0.029	4.706	5.295
Children surviving	2.933	0.064	1035	517	1.007	0.022	2.806	3.060
Knowing any contraceptive method	0.896	0.014	1035	517	1.521	0.016	0.867	0.925
Knowing any modern contraceptive method	0.871	0.016	1035	517	1.527	0.018	0.839	0.903
Ever used any contraceptive method	0.528	0.025	1035	517	1.593	0.047	0.479	0.578
Currently using any method	0.371	0.022	1035	517	1.459	0.059	0.327	0.415
Currently using a modern method	0.363	0.023	1035	517	1.538	0.063	0.317	0.409
Currently using pill	0.149	0.014	1035	517	1.300	0.097	0.120	0.178
Currently using IUD	0.015	0.004	1035	517	0.936	0.232	0.008	0.023
Currently using injection	0.178	0.020	1035	517	1.673	0.112	0.138	0.217
Currently using implants	0.014	0.005	1035	517	1.308	0.339	0.005	0.024
Currently using condom	0.003	0.002	1035	517	1.348	0.792	0.000	0.007
Currently using female sterilization	0.005	0.002	1035	517	0.896	0.414	0.001	0.008
Currently using male sterilization	0.000	0.000	1035	517	NA	NA	0.000	0.000
Currently using periodic abstinence	0.002	0.001	1035	517	0.882	0.590	0.000	0.005
Currently using withdrawal	0.000	0.000	1035	517	NA	NA	0.000	0.000
Using public sector source	0.529	0.033	383	188	1.307	0.063	0.462	0.596
Want no more children	0.352	0.016	1035	517	1.099	0.046	0.319	0.385
Want to delay at least 2 years	0.266	0.013	1035	517	0.953	0.049	0.240	0.293
Ideal number of children	3.865	0.064	716	353	1.203	0.017	3.736	3.994
Mothers received tetanus injection	0.627	0.027	703	354	1.275	0.043	0.573	0.681
Mothers received medical care at birth	0.467	0.034	703	354	1.577	0.073	0.399	0.536
Had diarrhea in the last 2 weeks	0.060	0.011	668	336	1.207	0.189	0.038	0.083
Treated with ORS packets	0.479	0.100	40	20	1.234	0.209	0.279	0.679
Sought medical treatment	0.643	0.075	40	20	0.954	0.117	0.493	0.794
Having health card	0.109	0.026	130	65	0.945	0.237	0.057	0.160
Received BCG vaccination	0.684	0.050	130	65	1.244	0.074	0.583	0.785
Received DPT vaccination (3 doses)	0.553	0.053	130	65	1.218	0.096	0.447	0.659
Received polio vaccination (3 doses)	0.652	0.045	130	65	1.072	0.068	0.563	0.741
Received measles vaccination	0.611	0.057	130	65	1.341	0.093	0.497	0.725
Fully immunized	0.461	0.057	130	65	1.319	0.125	0.346	0.575
Total fertility rate (3 years)	2.995	0.155	NA	2237	1.277	0.052	2.684	3.306
Neonatal mortality rate (0-9 years)	23.491	4.765	1511	755	1.194	0.203	13.960	33.021
Infant mortality rate (0-9 years)	45.495	6.470	1512	756	1.133	0.142	32.554	58.436
Child mortality rate (0-9 years)	13.712	3.898	1515	757	1.351	0.284	5.916	21.508
Under-five mortality rate (0-9 years)	58.583	7.189	1516	758	1.158	0.123	44.205	72.960
Postneonatal mortality rate (0-9 years)	22.004	4.009	1512	756	1.028	0.182	13.985	30.023

NA = Not applicable

Table B.2.14 Sampling errors - North Sumatra, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.304	0.016	1407	1687	1.270	0.051	0.272	0.335
No education	0.061	0.015	1407	1687	2.367	0.247	0.031	0.091
With secondary education or higher	0.409	0.031	1407	1687	2.345	0.075	0.347	0.470
Currently married	0.937	0.008	1407	1687	1.273	0.009	0.920	0.953
Married before age 20	0.527	0.022	1381	1655	1.612	0.041	0.484	0.571
Had first sexual intercourse before 18	0.296	0.018	1381	1655	1.438	0.060	0.261	0.332
Children ever born	3.705	0.104	1314	1581	1.525	0.028	3.497	3.913
Children ever born to women over 40	5.620	0.181	397	474	1.418	0.032	5.259	5.981
Children surviving	3.406	0.088	1314	1581	1.460	0.026	3.230	3.581
Knowing any contraceptive method	0.906	0.023	1314	1581	2.895	0.026	0.859	0.952
Knowing any modern contraceptive method	0.904	0.024	1314	1581	2.894	0.026	0.857	0.951
Ever used any contraceptive method	0.610	0.031	1314	1581	2.303	0.051	0.548	0.672
Currently using any method	0.460	0.027	1314	1581	1.933	0.058	0.407	0.513
Currently using a modern method	0.420	0.025	1314	1581	1.800	0.058	0.371	0.469
Currently using pill	0.132	0.013	1314	1581	1.340	0.095	0.107	0.157
Currently using IUD	0.044	0.011	1314	1581	1.884	0.241	0.023	0.066
Currently using injection	0.140	0.014	1314	1581	1.466	0.100	0.112	0.168
Currently using implants	0.028	0.007	1314	1581	1.625	0.264	0.013	0.043
Currently using condom	0.010	0.003	1314	1581	1.075	0.296	0.004	0.016
Currently using female sterilization	0.063	0.009	1314	1581	1.375	0.146	0.045	0.082
Currently using male sterilization	0.002	0.001	1314	1581	1.016	0.716	0.000	0.004
Currently using periodic abstinence	0.019	0.005	1314	1581	1.270	0.250	0.010	0.029
Currently using withdrawal	0.013	0.003	1314	1581	1.068	0.258	0.006	0.020
Using public sector source	0.357	0.031	556	671	1.542	0.088	0.295	0.420
Want no more children	0.453	0.018	1314	1581	1.339	0.041	0.416	0.490
Want to delay at least 2 years	0.209	0.015	1314	1581	1.379	0.074	0.178	0.240
Ideal number of children	3.806	0.104	926	1117	1.939	0.027	3.598	4.013
Mothers received tetanus injection	0.450	0.037	1045	1267	1.931	0.082	0.376	0.524
Mothers received medical care at birth	0.702	0.043	1045	1267	2.346	0.062	0.615	0.788
Had diarrhea in the last 2 weeks	0.089	0.011	981	1194	1.118	0.124	0.067	0.111
Treated with ORS packets	0.427	0.088	84	106	1.610	0.206	0.251	0.604
Sought medical treatment	0.497	0.049	84	106	0.870	0.098	0.400	0.595
Having health card	0.227	0.041	220	263	1.460	0.182	0.145	0.310
Received BCG vaccination	0.679	0.054	220	263	1.705	0.079	0.572	0.787
Received DPT vaccination (3 doses)	0.437	0.051	220	263	1.526	0.117	0.335	0.539
Received polio vaccination (3 doses)	0.577	0.042	220	263	1.264	0.073	0.492	0.661
Received measles vaccination	0.530	0.052	220	263	1.548	0.098	0.426	0.635
Fully immunized	0.359	0.043	220	263	1.311	0.118	0.274	0.444
Total fertility rate (3 years)	3.724	0.173	NA	6674	1.243	0.046	3.379	4.070
Neonatal mortality rate (0-9 years)	24.281	4.280	2216	2678	1.208	0.176	15.722	32.841
Infant mortality rate (0-9 years)	45.239	6.501	2216	2678	1.284	0.144	32.236	58.241
Child mortality rate (0-9 years)	27.925	5.633	2231	2696	1.483	0.202	16.660	39.191
Under-five mortality rate (0-9 years)	71.901	10.300	2231	2696	1.613	0.143	51.301	92.501
Postneonatal mortality rate (0-9 years)	20.957	3.919	2216	2678	1.229	0.187	13.120	28.794

NA = Not applicable



Table B.2.15 Sampling errors - West Sumatra, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.159	0.025	905	543	2.064	0.158	0.109	0.209
No education	0.032	0.010	905	543	1.673	0.308	0.012	0.051
With secondary education or higher	0.458	0.031	905	543	1.893	0.068	0.395	0.521
Currently married	0.926	0.008	905	543	0.901	0.008	0.911	0.942
Married before age 20	0.525	0.026	892	535	1.580	0.050	0.473	0.578
Had first sexual intercourse before 18	0.319	0.027	892	535	1.749	0.086	0.265	0.374
Children ever born	3.377	0.122	838	503	1.501	0.036	3.133	3.622
Children ever born to women over 40	5.465	0.262	224	133	1.593	0.048	4.942	5.988
Children surviving	2.938	0.094	838	503	1.393	0.032	2.749	3.127
Knowing any contraceptive method	0.942	0.010	838	503	1.290	0.011	0.921	0.963
Knowing any modern contraceptive method	0.940	0.011	838	503	1.284	0.011	0.919	0.961
Ever used any contraceptive method	0.698	0.020	838	503	1.276	0.029	0.658	0.739
Currently using any method	0.448	0.026	838	503	1.525	0.058	0.396	0.501
Currently using a modern method	0.418	0.026	838	503	1.498	0.061	0.367	0.469
Currently using pill	0.086	0.012	838	503	1.263	0.143	0.061	0.110
Currently using IUD	0.084	0.013	838	503	1.407	0.161	0.057	0.110
Currently using injection	0.182	0.019	838	503	1.398	0.102	0.145	0.220
Currently using implants	0.038	0.012	838	503	1.788	0.310	0.014	0.062
Currently using condom	0.007	0.003	838	503	1.027	0.415	0.001	0.013
Currently using female sterilization	0.021	0.005	838	503	1.044	0.246	0.011	0.031
Currently using male sterilization	0.000	0.000	838	503	NA	NA	0.000	0.000
Currently using periodic abstinence	0.013	0.004	838	503	0.986	0.296	0.005	0.021
Currently using withdrawal	0.013	0.004	838	503	1.049	0.319	0.005	0.021
Using public sector source	0.435	0.031	347	210	1.154	0.071	0.374	0.497
Want no more children	0.488	0.019	838	503	1.095	0.039	0.450	0.525
Want to delay at least 2 years	0.280	0.015	838	503	0.993	0.055	0.249	0.310
Ideal number of children	3.422	0.095	673	406	1.788	0.028	3.232	3.611
Mothers received tetanus injection	0.653	0.034	634	385	1.481	0.053	0.584	0.721
Mothers received medical care at birth	0.755	0.038	634	385	1.834	0.051	0.679	0.832
Had diarrhea in the last 2 weeks	0.134	0.019	593	360	1.296	0.143	0.095	0.172
Treated with ORS packets	0.408	0.077	80	48	1.340	0.190	0.253	0.563
Sought medical treatment	0.499	0.057	80	48	0.930	0.114	0.385	0.613
Having health card	0.147	0.038	120	73	1.165	0.255	0.072	0.222
Received BCG vaccination	0.832	0.036	120	73	1.057	0.043	0.760	0.904
Received DPT vaccination (3 doses)	0.520	0.047	120	73	1.040	0.091	0.425	0.614
Received polio vaccination (3 doses)	0.830	0.031	120	73	0.921	0.038	0.767	0.893
Received measles vaccination	0.661	0.046	120	73	1.066	0.069	0.569	0.753
Fully immunized	0.444	0.046	120	73	1.030	0.105	0.351	0.537
Total fertility rate (3 years)	3.400	0.207	NA	2237	1.329	0.061	2.986	3.814
Neonatal mortality rate (0-9 years)	30.828	6.034	1230	748	1.147	0.196	18.760	42.897
Infant mortality rate (0-9 years)	65.841	11.812	1232	749	1.442	0.179	42.217	89.466
Child mortality rate (0-9 years)	31.293	5.100	1245	757	1.043	0.163	21.094	41.493
Under-five mortality rate (0-9 years)	95.074	12.873	1249	759	1.376	0.135	69.328	120.820
Postneonatal mortality rate (0-9 years)	35.013	8.733	1230	748	1.304	0.249	17.547	52.479

NA = Not applicable



Table B.2.16 Sampling errors - South Sumatra, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.286	0.015	1102	942	1.071	0.051	0.256	0.315
No education	0.096	0.015	1102	942	1.720	0.159	0.066	0.127
With secondary education or higher	0.327	0.033	1102	942	2.309	0.100	0.262	0.393
Currently married	0.924	0.007	1102	942	0.909	0.008	0.910	0.939
Married before age 20	0.629	0.026	1060	906	1.718	0.041	0.578	0.680
Had first sexual intercourse before 18	0.414	0.023	1060	906	1.538	0.056	0.367	0.460
Children ever born	3.198	0.088	1017	870	1.238	0.028	3.021	3.375
Children ever born to women over 40	5.403	0.195	253	217	1.380	0.036	5.013	5.793
Children surviving	2.887	0.064	1017	870	1.036	0.022	2.758	3.016
Knowing any contraceptive method	0.992	0.006	1017	870	2.196	0.006	0.980	1.000
Knowing any modern contraceptive method	0.991	0.006	1017	870	2.080	0.006	0.979	1.000
Ever used any contraceptive method	0.781	0.021	1017	870	1.616	0.027	0.739	0.823
Currently using any method	0.579	0.017	1017	870	1.124	0.030	0.544	0.614
Currently using a modern method	0.548	0.017	1017	870	1.107	0.032	0.513	0.582
Currently using pill	0.158	0.020	1017	870	1.763	0.127	0.118	0.199
Currently using IUD	0.030	0.006	1017	870	1.189	0.212	0.017	0.043
Currently using injection	0.212	0.016	1017	870	1.241	0.075	0.180	0.244
Currently using implants	0.094	0.017	1017	870	1.827	0.178	0.060	0.127
Currently using condom	0.009	0.003	1017	870	1.153	0.373	0.002	0.016
Currently using female sterilization	0.043	0.005	1017	870	0.855	0.127	0.032	0.054
Currently using male sterilization	0.000	0.000	1017	870	NA	NA	0.000	0.000
Currently using periodic abstinence	0.020	0.006	1017	870	1.411	0.306	0.008	0.033
Currently using withdrawal	0.007	0.003	1017	870	1.189	0.429	0.001	0.014
Using public sector source	0.368	0.034	566	477	1.668	0.092	0.300	0.436
Want no more children	0.449	0.015	1017	870	0.959	0.033	0.419	0.479
Want to delay at least 2 years	0.264	0.011	1017	870	0.815	0.043	0.241	0.286
Ideal number of children	3.202	0.054	817	694	1.230	0.017	3.094	3.310
Mothers received tetanus injection	0.744	0.035	607	516	1.762	0.047	0.674	0.813
Mothers received medical care at birth	0.626	0.044	607	516	1.981	0.071	0.538	0.715
Had diarrhea in the last 2 weeks	0.110	0.013	582	495	0.946	0.116	0.085	0.136
Treated with ORS packets	0.597	0.066	66	54	1.057	0.111	0.465	0.729
Sought medical treatment	0.655	0.084	66	54	1.361	0.128	0.488	0.822
Having health card	0.324	0.047	132	110	1.128	0.144	0.230	0.418
Received BCG vaccination	0.900	0.033	132	110	1.175	0.037	0.834	0.966
Received DPT vaccination (3 doses)	0.718	0.047	132	110	1.159	0.065	0.624	0.812
Received polio vaccination (3 doses)	0.804	0.046	132	110	1.284	0.058	0.711	0.896
Received measles vaccination	0.781	0.038	132	110	1.026	0.049	0.705	0.858
Fully immunized	0.623	0.052	132	110	1.196	0.083	0.519	0.726
Total fertility rate (3 years)	2.637	0.117	NA	3695	1.106	0.044	2.403	2.872
Neonatal mortality rate (0-9 years)	23.128	4.085	1339	1140	0.927	0.177	14.959	31.297
Infant mortality rate (0-9 years)	52.989	9.261	1344	1143	1.389	0.175	34.468	71.510
Child mortality rate (0-9 years)	18.434	4.256	1349	1147	1.027	0.231	9.922	26.945
Under-five mortality rate (0-9 years)	70.446	11.445	1354	1151	1.519	0.162	47.555	93.337
Postneonatal mortality rate (0-9 years)	29.861	7.557	1344	1143	1.506	0.253	14.747	44.975

NA = Not applicable

Table B.2.17 Sampling errors - Lampung, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.124	0.012	1003	913	1.190	0.100	0.099	0.149
No education	0.079	0.012	1003	913	1.400	0.151	0.055	0.103
With secondary education or higher	0.252	0.022	1003	913	1.574	0.086	0.209	0.295
Currently married	0.964	0.005	1003	913	0.912	0.006	0.954	0.975
Married before age 20	0.759	0.014	953	864	0.991	0.018	0.731	0.786
Had first sexual intercourse before 18	0.549	0.018	953	864	1.114	0.033	0.513	0.585
Children ever born	3.036	0.087	966	880	1.260	0.029	2.862	3.210
Children ever born to women over 40	5.373	0.174	191	174	1.061	0.032	5.024	5.722
Children surviving	2.788	0.082	966	880	1.322	0.029	2.624	2.951
Knowing any contraceptive method	0.994	0.003	966	880	1.056	0.003	0.989	0.999
Knowing any modern contraceptive method	0.994	0.003	966	880	1.056	0.003	0.989	0.999
Ever used any contraceptive method	0.836	0.011	966	880	0.898	0.013	0.815	0.857
Currently using any method	0.665	0.019	966	880	1.248	0.029	0.627	0.703
Currently using a modern method	0.647	0.019	966	880	1.221	0.029	0.610	0.685
Currently using pill	0.233	0.024	966	880	1.787	0.104	0.185	0.282
Currently using IUD	0.069	0.013	966	880	1.614	0.191	0.042	0.095
Currently using injection	0.199	0.016	966	880	1.260	0.081	0.166	0.231
Currently using implants	0.110	0.013	966	880	1.293	0.118	0.084	0.136
Currently using condom	0.005	0.002	966	880	1.038	0.452	0.001	0.010
Currently using female sterilization	0.015	0.005	966	880	1.345	0.355	0.004	0.025
Currently using male sterilization	0.016	0.005	966	880	1.155	0.295	0.006	0.025
Currently using periodic abstinence	0.009	0.003	966	880	0.999	0.346	0.003	0.014
Currently using withdrawal	0.004	0.002	966	880	1.183	0.602	0.000	0.009
Using public sector source	0.331	0.025	633	570	1.342	0.076	0.280	0.381
Want no more children	0.483	0.017	966	880	1.051	0.035	0.449	0.516
Want to delay at least 2 years	0.302	0.016	966	880	1.093	0.053	0.270	0.335
Ideal number of children	2.997	0.037	866	784	1.029	0.012	2.923	3.072
Mothers received tetanus injection	0.762	0.027	601	544	1.427	0.036	0.708	0.817
Mothers received medical care at birth	0.481	0.039	601	544	1.674	0.081	0.403	0.558
Had diarrhea in the last 2 weeks	0.084	0.014	572	517	1.173	0.168	0.056	0.113
Treated with ORS packets	0.562	0.101	47	44	1.349	0.180	0.359	0.764
Sought medical treatment	0.633	0.087	47	44	1.185	0.137	0.460	0.807
Having health card	0.451	0.053	126	113	1.163	0.118	0.345	0.557
Received BCG vaccination	0.933	0.024	126	113	1.073	0.026	0.885	0.981
Received DPT vaccination (3 doses)	0.778	0.037	126	113	0.972	0.047	0.705	0.851
Received polio vaccination (3 doses)	0.838	0.036	126	113	1.076	0.043	0.766	0.909
Received measles vaccination	0.831	0.029	126	113	0.855	0.035	0.773	0.888
Fully immunized	0.693	0.044	126	113	1.044	0.063	0.605	0.780
Total fertility rate (3 years)	2.907	0.186	NA	3227	1.381	0.064	2.536	3.279
Neonatal mortality rate (0-9 years)	27.601	5.092	1264	1160	1.022	0.184	17.417	37.785
Infant mortality rate (0-9 years)	48.167	7.585	1266	1162	1.125	0.157	32.998	63.336
Child mortality rate (0-9 years)	17.027	4.245	1268	1164	1.174	0.249	8.537	25.517
Under-five mortality rate (0-9 years)	64.374	7.559	1270	1166	0.954	0.117	49.257	79.492
Postneonatal mortality rate (0-9 years)	20.566	4.457	1266	1162	1.116	0.217	11.652	29.480

NA = Not applicable



Table B.2.18 Sampling errors - West Nusa Tenggara, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.151	0.013	1105	595	1.183	0.085	0.125	0.176
No education	0.334	0.023	1105	595	1.649	0.070	0.287	0.380
With secondary education or higher	0.216	0.022	1105	595	1.789	0.103	0.172	0.260
Currently married	0.881	0.014	1105	595	1.406	0.016	0.853	0.908
Married before age 20	0.726	0.019	1038	558	1.363	0.026	0.688	0.764
Had first sexual intercourse before 18	0.507	0.020	1038	558	1.279	0.039	0.467	0.547
Children ever born	3.333	0.091	978	524	1.104	0.027	3.151	3.514
Children ever born to women over 40	6.351	0.227	186	99	1.185	0.036	5.897	6.806
Children surviving	2.602	0.073	978	524	1.215	0.028	2.457	2.748
Knowing any contraceptive method	0.991	0.003	978	524	0.882	0.003	0.986	0.997
Knowing any modern contraceptive method	0.990	0.003	978	524	0.848	0.003	0.985	0.996
Ever used any contraceptive method	0.795	0.016	978	524	1.273	0.021	0.762	0.828
Currently using any method	0.565	0.020	978	524	1.249	0.035	0.525	0.604
Currently using a modern method	0.543	0.019	978	524	1.207	0.035	0.505	0.582
Currently using pill	0.137	0.020	978	524	1.784	0.143	0.097	0.176
Currently using IUD	0.065	0.012	978	524	1.481	0.179	0.042	0.089
Currently using injection	0.168	0.016	978	524	1.331	0.095	0.136	0.199
Currently using implants	0.153	0.014	978	524	1.230	0.093	0.125	0.182
Currently using condom	0.004	0.003	978	524	1.214	0.595	0.000	0.009
Currently using female sterilization	0.017	0.004	978	524	0.981	0.242	0.009	0.025
Currently using male sterilization	0.000	0.000	978	524	NA	NA	0.000	0.000
Currently using periodic abstinence	0.004	0.002	978	524	0.997	0.510	0.000	0.008
Currently using withdrawal	0.004	0.002	978	524	1.014	0.509	0.000	0.008
Using public sector source	0.643	0.030	528	286	1.425	0.046	0.583	0.702
Want no more children	0.394	0.016	978	524	1.034	0.041	0.361	0.426
Want to delay at least 2 years	0.409	0.018	978	524	1.173	0.045	0.372	0.445
Ideal number of children	3.518	0.079	924	491	1.466	0.022	3.360	3.676
Mothers received tetanus injection	0.721	0.025	701	371	1.272	0.034	0.671	0.770
Mothers received medical care at birth	0.278	0.020	701	371	1.085	0.074	0.237	0.319
Had diarrhea in the last 2 weeks	0.125	0.014	648	344	1.016	0.109	0.098	0.153
Treated with ORS packets	0.706	0.050	84	43	0.981	0.071	0.606	0.807
Sought medical treatment	0.670	0.059	84	43	1.113	0.088	0.552	0.789
Having health card	0.227	0.043	129	69	1.160	0.189	0.141	0.313
Received BCG vaccination	0.913	0.032	129	69	1.301	0.036	0.848	0.978
Received DPT vaccination (3 doses)	0.791	0.047	129	69	1.317	0.060	0.697	0.886
Received polio vaccination (3 doses)	0.857	0.032	129	69	1.040	0.038	0.793	0.922
Received measles vaccination	0.840	0.044	129	69	1.344	0.052	0.753	0.927
Fully immunized	0.695	0.048	129	69	1.178	0.069	0.599	0.791
Total fertility rate (3 years)	2.951	0.151	NA	2197	1.249	0.051	2.650	3.252
Neonatal mortality rate (0-9 years)	46.707	6.694	1478	780	1.019	0.143	33.319	60.094
Infant mortality rate (0-9 years)	110.506	11.240	1485	784	1.144	0.102	88.025	132.987
Child mortality rate (0-9 years)	43.885	6.188	1496	789	1.086	0.141	31.508	56.261
Under-five mortality rate (0-9 years)	149.541	13.300	1503	793	1.241	0.089	122.941	176.140
Postneonatal mortality rate (0-9 years)	63.799	7.684	1485	784	1.040	0.120	48.432	79.166

NA = Not applicable



Table B.2.19 Sampling errors - West Kalimantan, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.186	0.018	1001	479	1.469	0.097	0.150	0.222
No education	0.248	0.025	1001	479	1.817	0.100	0.199	0.298
With secondary education or higher	0.275	0.024	1001	479	1.690	0.087	0.227	0.323
Currently married	0.930	0.009	1001	479	1.143	0.010	0.912	0.948
Married before age 20	0.647	0.023	959	458	1.458	0.035	0.602	0.692
Had first sexual intercourse before 18	0.444	0.028	959	458	1.750	0.063	0.388	0.500
Children ever born	3.299	0.105	930	445	1.357	0.032	3.089	3.509
Children ever born to women over 40	5.476	0.231	228	109	1.329	0.042	5.014	5.937
Children surviving	2.892	0.083	930	445	1.284	0.029	2.726	3.058
Knowing any contraceptive method	0.958	0.007	930	445	1.094	0.007	0.944	0.973
Knowing any modern contraceptive method	0.953	0.008	930	445	1.153	0.008	0.937	0.969
Ever used any contraceptive method	0.775	0.024	930	445	1.733	0.031	0.727	0.822
Currently using any method	0.581	0.025	930	445	1.540	0.043	0.531	0.631
Currently using a modern method	0.554	0.026	930	445	1.606	0.047	0.502	0.606
Currently using pill	0.264	0.020	930	445	1.360	0.075	0.224	0.303
Currently using IUD	0.021	0.006	930	445	1.188	0.265	0.010	0.032
Currently using injection	0.222	0.018	930	445	1.288	0.079	0.187	0.257
Currently using implants	0.022	0.010	930	445	2.070	0.456	0.002	0.041
Currently using condom	0.004	0.001	930	445	0.663	0.352	0.001	0.006
Currently using female sterilization	0.018	0.006	930	445	1.400	0.343	0.006	0.030
Currently using male sterilization	0.005	0.003	930	445	1.344	0.648	0.000	0.011
Currently using periodic abstinence	0.009	0.004	930	445	1.192	0.414	0.002	0.016
Currently using withdrawal	0.001	0.001	930	445	1.121	1.005	0.000	0.004
Using public sector source	0.620	0.044	519	248	2.065	0.071	0.532	0.708
Want no more children	0.480	0.021	930	445	1.279	0.044	0.438	0.521
Want to delay at least 2 years	0.217	0.011	930	445	0.829	0.052	0.195	0.240
Ideal number of children	3.321	0.092	734	352	1.603	0.028	3.138	3.505
Mothers received tetanus injection	0.682	0.034	681	324	1.570	0.049	0.615	0.749
Mothers received medical care at birth	0.415	0.035	681	324	1.595	0.085	0.344	0.485
Had diarrhea in the last 2 weeks	0.150	0.025	643	305	1.649	0.166	0.100	0.200
Treated with ORS packets	0.527	0.069	90	46	1.244	0.131	0.389	0.666
Sought medical treatment	0.602	0.066	90	46	1.205	0.110	0.470	0.735
Having health card	0.370	0.046	135	63	1.101	0.125	0.278	0.463
Received BCG vaccination	0.810	0.043	135	63	1.255	0.053	0.725	0.896
Received DPT vaccination (3 doses)	0.688	0.048	135	63	1.191	0.070	0.591	0.784
Received polio vaccination (3 doses)	0.800	0.036	135	63	1.045	0.046	0.727	0.872
Received measles vaccination	0.661	0.038	135	63	0.930	0.058	0.584	0.737
Fully immunized	0.529	0.059	135	63	1.354	0.111	0.412	0.647
Total fertility rate (3 years)	3.354	0.197	NA	1845	1.207	0.059	2.960	3.748
Neonatal mortality rate (0-9 years)	28.414	5.108	1393	662	1.122	0.180	18.198	38.629
Infant mortality rate (0-9 years)	70.283	10.474	1398	664	1.277	0.149	49.335	91.230
Child mortality rate (0-9 years)	19.233	3.857	1400	665	1.033	0.201	11.519	26.946
Under-five mortality rate (0-9 years)	88.164	11.764	1405	667	1.338	0.133	64.635	111.693
Postneonatal mortality rate (0-9 years)	41.869	8.433	1398	664	1.225	0.201	25.003	58.735

NA = Not applicable

Table B.2.20 Sampling errors - South Kalimantan, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.252	0.013	1056	433	0.941	0.050	0.227	0.277
No education	0.085	0.011	1056	433	1.241	0.125	0.064	0.106
With secondary education or higher	0.334	0.025	1056	433	1.702	0.074	0.285	0.384
Currently married	0.899	0.009	1056	433	0.992	0.010	0.881	0.918
Married before age 20	0.730	0.014	1012	415	1.026	0.020	0.701	0.758
Had first sexual intercourse before 18	0.540	0.018	1012	415	1.147	0.033	0.504	0.576
Children ever born	2.847	0.091	952	389	1.276	0.032	2.666	3.028
Children ever born to women over 40	4.895	0.217	213	88	1.215	0.044	4.460	5.330
Children surviving	2.462	0.066	952	389	1.120	0.027	2.330	2.593
Knowing any contraceptive method	0.994	0.003	952	389	1.160	0.003	0.988	1.000
Knowing any modern contraceptive method	0.993	0.003	952	389	0.994	0.003	0.987	0.998
Ever used any contraceptive method	0.802	0.020	952	389	1.515	0.024	0.763	0.841
Currently using any method	0.602	0.019	952	389	1.214	0.032	0.563	0.640
Currently using a modern method	0.585	0.019	952	389	1.201	0.033	0.547	0.624
Currently using pill	0.381	0.019	952	389	1.204	0.050	0.343	0.419
Currently using IUD	0.020	0.005	952	389	1.171	0.268	0.009	0.030
Currently using injection	0.122	0.012	952	389	1.085	0.094	0.099	0.145
Currently using implants	0.035	0.007	952	389	1.160	0.196	0.022	0.049
Currently using condom	0.003	0.002	952	389	0.985	0.589	0.000	0.006
Currently using female sterilization	0.024	0.008	952	389	1.586	0.325	0.009	0.040
Currently using male sterilization	0.000	0.000	952	389	NA	NA	0.000	0.000
Currently using periodic abstinence	0.004	0.002	952	389	1.146	0.573	0.000	0.009
Currently using withdrawal	0.001	0.001	952	389	1.043	0.999	0.000	0.003
Using public sector source	0.392	0.033	560	228	1.586	0.084	0.327	0.457
Want no more children	0.417	0.015	952	389	0.939	0.036	0.387	0.447
Want to delay at least 2 years	0.302	0.013	952	389	0.892	0.044	0.275	0.328
Ideal number of children	2.908	0.044	732	298	0.984	0.015	2.819	2.997
Mothers received tetanus injection	0.717	0.033	518	214	1.441	0.046	0.652	0.783
Mothers received medical care at birth	0.539	0.031	518	214	1.251	0.057	0.477	0.601
Had diarrhea in the last 2 weeks	0.114	0.013	483	199	0.887	0.112	0.088	0.139
Treated with ORS packets	0.477	0.062	54	23	0.927	0.130	0.353	0.602
Sought medical treatment	0.470	0.072	54	23	1.071	0.153	0.327	0.614
Having health card	0.236	0.055	93	38	1.248	0.234	0.126	0.347
Received BCG vaccination	0.883	0.044	93	38	1.311	0.050	0.795	0.971
Received DPT vaccination (3 doses)	0.675	0.048	93	38	0.983	0.071	0.579	0.771
Received polio vaccination (3 doses)	0.766	0.050	93	38	1.126	0.065	0.667	0.866
Received measles vaccination	0.695	0.060	93	38	1.249	0.086	0.575	0.815
Fully immunized	0.564	0.060	93	38	1.157	0.106	0.444	0.683
Total fertility rate (3 years)	2.567	0.132	NA	1589	0.955	0.051	2.303	2.831
Neonatal mortality rate (0-9 years)	26.952	6.158	1153	474	1.229	0.228	14.636	39.267
Infant mortality rate (0-9 years)	70.743	9.512	1156	475	1.231	0.134	51.718	89.767
Child mortality rate (0-9 years)	17.800	4.111	1157	476	1.45	0.231	9.578	26.022
Under-five mortality rate (0-9 years)	87.283	11.182	1160	477	1.364	0.128	64.920	109.647
Postneonatal mortality rate (0-9 years)	43.791	6.900	1156	475	1.118	0.158	29.991	57.592

NA = Not applicable



Table B.2.21 Sampling errors - North Sulawesi, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.214	0.017	860	340	1.206	0.079	0.181	0.248
No education	0.014	0.004	860	340	0.888	0.257	0.007	0.021
With secondary education or higher	0.513	0.032	860	340	1.903	0.063	0.448	0.577
Currently married	0.966	0.005	860	340	0.747	0.005	0.957	0.975
Married before age 20	0.476	0.018	831	329	1.042	0.038	0.440	0.512
Had first sexual intercourse before 18	0.263	0.015	831	329	0.957	0.056	0.234	0.293
Children ever born	2.535	0.069	832	329	1.136	0.027	2.398	2.672
Children ever born to women over 40	3.842	0.171	205	80	1.137	0.045	3.500	4.185
Children surviving	2.289	0.058	832	329	1.134	0.025	2.173	2.406
Knowing any contraceptive method	0.991	0.002	832	329	0.671	0.002	0.987	0.996
Knowing any modern contraceptive method	0.991	0.002	832	329	0.671	0.002	0.987	0.996
Ever used any contraceptive method	0.892	0.011	832	329	1.020	0.012	0.871	0.914
Currently using any method	0.712	0.017	832	329	1.065	0.023	0.679	0.745
Currently using a modern method	0.635	0.018	832	329	1.068	0.028	0.599	0.670
Currently using pill	0.221	0.022	832	329	1.548	0.101	0.176	0.265
Currently using IUD	0.142	0.020	832	329	1.672	0.142	0.102	0.183
Currently using injection	0.156	0.016	832	329	1.235	0.100	0.125	0.187
Currently using implants	0.097	0.023	832	329	2.216	0.234	0.052	0.143
Currently using condom	0.001	0.001	832	329	0.887	1.003	0.000	0.003
Currently using female sterilization	0.017	0.006	832	329	1.392	0.366	0.005	0.030
Currently using male sterilization	0.000	0.000	832	329	NA	NA	0.000	0.000
Currently using periodic abstinence	0.038	0.009	832	329	1.375	0.239	0.020	0.057
Currently using withdrawal	0.007	0.004	832	329	1.212	0.495	0.000	0.014
Using public sector source	0.506	0.034	533	209	1.577	0.068	0.438	0.575
Want no more children	0.579	0.016	832	329	0.909	0.027	0.547	0.610
Want to delay at least 2 years	0.202	0.016	832	329	1.159	0.080	0.169	0.234
Ideal number of children	2.383	0.037	700	275	1.261	0.015	2.310	2.457
Mothers received tetanus injection	0.906	0.017	479	192	1.130	0.018	0.872	0.939
Mothers received medical care at birth	0.575	0.042	479	192	1.624	0.074	0.491	0.660
Had diarrhea in the last 2 weeks	0.155	0.020	455	183	1.142	0.128	0.116	0.195
Treated with ORS packets	0.596	0.053	73	28	0.892	0.090	0.489	0.703
Sought medical treatment	0.517	0.078	73	28	1.260	0.151	0.361	0.673
Having health card	0.263	0.046	100	40	1.065	0.177	0.170	0.356
Received BCG vaccination	0.955	0.027	100	40	1.291	0.028	0.902	1.000
Received DPT vaccination (3 doses)	0.807	0.045	100	40	1.158	0.056	0.716	0.897
Received polio vaccination (3 doses)	0.862	0.036	100	40	1.046	0.041	0.790	0.933
Received measles vaccination	0.854	0.037	100	40	1.054	0.043	0.780	0.927
Fully immunized	0.731	0.045	100	40	1.031	0.062	0.641	0.822
Total fertility rate (3 years)	2.604	0.136	NA	1351	0.939	0.052	2.332	2.877
Neonatal mortality rate (0-9 years)	20.005	4.411	961	385	0.995	0.221	11.182	28.828
Infant mortality rate (0-9 years)	47.637	9.065	963	386	1.226	0.190	29.508	65.767
Child mortality rate (0-9 years)	14.064	4.106	962	386	0.995	0.292	5.852	22.276
Under-five mortality rate (0-9 years)	61.031	10.103	964	386	1.196	0.166	40.825	81.238
Postneonatal mortality rate (0-9 years)	27.632	7.169	963	386	1.264	0.259	13.294	41.970

NA = Not applicable



Table B.2.22 Sampling errors - South Sulawesi, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.201	0.015	1268	1049	1.356	0.076	0.170	0.231
No education	0.162	0.021	1268	1049	2.007	0.128	0.120	0.203
With secondary education or higher	0.311	0.029	1268	1049	2.205	0.092	0.254	0.369
Currently married	0.900	0.011	1268	1049	1.299	0.012	0.878	0.922
Married before age 20	0.626	0.018	1218	1004	1.316	0.029	0.590	0.663
Had first sexual intercourse before 18	0.431	0.018	1218	1004	1.280	0.042	0.395	0.468
Children ever born	3.172	0.082	1139	945	1.193	0.026	3.008	3.335
Children ever born to women over 40	4.900	0.140	307	248	0.949	0.029	4.620	5.181
Children surviving	2.857	0.075	1139	945	1.227	0.026	2.708	3.006
Knowing any contraceptive method	0.941	0.012	1139	945	1.720	0.013	0.917	0.965
Knowing any modern contraceptive method	0.935	0.014	1139	945	1.893	0.015	0.907	0.962
Ever used any contraceptive method	0.601	0.022	1139	945	1.484	0.036	0.558	0.644
Currently using any method	0.415	0.022	1139	945	1.527	0.054	0.370	0.459
Currently using a modern method	0.367	0.022	1139	945	1.542	0.060	0.323	0.411
Currently using pill	0.158	0.017	1139	945	1.585	0.108	0.124	0.193
Currently using IUD	0.020	0.005	1139	945	1.176	0.242	0.010	0.030
Currently using injection	0.127	0.012	1139	945	1.238	0.096	0.103	0.152
Currently using implants	0.038	0.012	1139	945	2.178	0.324	0.013	0.063
Currently using condom	0.003	0.002	1139	945	1.002	0.573	0.000	0.006
Currently using female sterilization	0.020	0.005	1139	945	1.303	0.271	0.009	0.031
Currently using male sterilization	0.000	0.000	1139	945	NA	NA	0.000	0.000
Currently using periodic abstinence	0.007	0.003	1139	945	1.118	0.395	0.001	0.013
Currently using withdrawal	0.035	0.007	1139	945	1.237	0.192	0.022	0.049
Using public sector source	0.640	0.038	412	346	1.610	0.060	0.563	0.716
Want no more children	0.381	0.018	1139	945	1.216	0.046	0.346	0.416
Want to delay at least 2 years	0.261	0.013	1139	945	0.985	0.049	0.235	0.286
Ideal number of children	3.382	0.078	856	708	1.466	0.023	3.226	3.538
Mothers received tetanus injection	0.799	0.026	799	655	1.549	0.032	0.748	0.850
Mothers received medical care at birth	0.479	0.035	799	655	1.662	0.073	0.409	0.549
Had diarrhea in the last 2 weeks	0.089	0.010	765	623	0.927	0.109	0.070	0.109
Treated with ORS packets	0.512	0.062	68	56	1.005	0.121	0.388	0.637
Sought medical treatment	0.537	0.060	68	56	0.981	0.112	0.416	0.658
Having health card	0.217	0.033	150	124	0.962	0.153	0.151	0.284
Received BCG vaccination	0.784	0.039	150	124	1.163	0.050	0.706	0.863
Received DPT vaccination (3 doses)	0.647	0.043	150	124	1.105	0.067	0.560	0.734
Received polio vaccination (3 doses)	0.647	0.044	150	124	1.121	0.068	0.559	0.735
Received measles vaccination	0.652	0.041	150	124	1.056	0.063	0.569	0.735
Fully immunized	0.561	0.045	150	124	1.101	0.080	0.471	0.651
Total fertility rate (3 years)	2.880	0.150	NA	4489	1.179	0.052	2.580	3.180
Neonatal mortality rate (0-9 years)	23.200	3.546	1672	1375	0.942	0.153	16.107	30.293
Infant mortality rate (0-9 years)	63.007	9.074	1677	1379	1.378	0.144	44.859	81.155
Child mortality rate (0-9 years)	17.077	3.749	1677	1379	0.952	0.220	9.579	24.576
Under-five mortality rate (0-9 years)	79.008	10.564	1682	1384	1.391	0.134	57.881	100.135
Postneonatal mortality rate (0-9 years)	39.807	7.945	1677	1379	1.489	0.200	23.916	55.697

NA = Not applicable

Table B.2.23 Sampling errors - Riau, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.341	0.015	1004	477	0.983	0.043	0.312	0.371
No education	0.139	0.015	1004	477	1.367	0.108	0.109	0.169
With secondary education or higher	0.320	0.022	1004	477	1.505	0.069	0.276	0.364
Currently married	0.944	0.008	1004	477	1.154	0.009	0.928	0.961
Married before age 20	0.621	0.022	971	461	1.437	0.036	0.576	0.666
Had first sexual intercourse before 18	0.423	0.023	971	461	1.430	0.054	0.377	0.468
Children ever born	3.380	0.132	948	450	1.563	0.039	3.117	3.644
Children ever born to women over 40	5.779	0.307	209	102	1.495	0.053	5.166	6.393
Children surviving	2.996	0.115	948	450	1.644	0.038	2.765	3.226
Knowing any contraceptive method	0.974	0.007	948	450	1.326	0.007	0.960	0.987
Knowing any modern contraceptive method	0.973	0.007	948	450	1.294	0.007	0.959	0.987
Ever used any contraceptive method	0.693	0.020	948	450	1.353	0.029	0.652	0.733
Currently using any method	0.481	0.022	948	450	1.376	0.046	0.436	0.525
Currently using a modern method	0.442	0.020	948	450	1.258	0.046	0.402	0.483
Currently using pill	0.169	0.016	948	450	1.286	0.093	0.138	0.201
Currently using IUD	0.033	0.007	948	450	1.209	0.213	0.019	0.047
Currently using injection	0.188	0.015	948	450	1.141	0.077	0.159	0.217
Currently using implants	0.014	0.005	948	450	1.178	0.321	0.005	0.023
Currently using condom	0.012	0.003	948	450	0.817	0.242	0.006	0.018
Currently using female sterilization	0.024	0.004	948	450	0.867	0.179	0.016	0.033
Currently using male sterilization	0.002	0.001	948	450	0.985	0.767	0.000	0.004
Currently using periodic abstinence	0.010	0.004	948	450	1.365	0.435	0.001	0.019
Currently using withdrawal	0.019	0.006	948	450	1.372	0.322	0.007	0.031
Using public sector source	0.458	0.036	419	199	1.461	0.078	0.387	0.529
Want no more children	0.426	0.019	948	450	1.179	0.045	0.388	0.463
Want to delay at least 2 years	0.277	0.016	948	450	1.083	0.057	0.246	0.309
Ideal number of children	3.339	0.088	731	351	1.607	0.026	3.164	3.514
Mothers received tetanus injection	0.588	0.036	729	344	1.630	0.060	0.517	0.659
Mothers received medical care at birth	0.533	0.037	729	344	1.636	0.069	0.460	0.607
Had diarrhea in the last 2 weeks	0.140	0.019	691	326	1.343	0.134	0.102	0.177
Treated with ORS packets	0.507	0.039	100	46	0.715	0.077	0.429	0.585
Sought medical treatment	0.483	0.048	100	46	0.881	0.100	0.387	0.579
Having health card	0.191	0.035	116	54	0.958	0.184	0.121	0.261
Received BCG vaccination	0.742	0.048	116	54	1.148	0.065	0.645	0.839
Received DPT vaccination (3 doses)	0.590	0.046	116	54	1.000	0.078	0.498	0.682
Received polio vaccination (3 doses)	0.745	0.051	116	54	1.253	0.068	0.643	0.846
Received measles vaccination	0.657	0.042	116	54	0.945	0.064	0.573	0.741
Fully immunized	0.521	0.043	116	54	0.914	0.083	0.435	0.608
Total fertility rate (3 years)	3.418	0.177	NA	1910	1.176	0.052	3.065	3.772
Neonatal mortality rate (0-9 years)	32.895	6.313	1439	678	1.099	0.192	20.268	45.522
Infant mortality rate (0-9 years)	60.412	7.387	1443	680	0.999	0.122	45.637	75.187
Child mortality rate (0-9 years)	23.413	4.792	1446	682	1.021	0.205	13.829	32.997
Under-five mortality rate (0-9 years)	82.411	9.310	1451	684	1.042	0.113	63.792	101.030
Postneonatal mortality rate (0-9 years)	27.517	5.179	1442	679	1.130	0.188	17.159	37.875

NA = Not applicable



Table B.2.24 Sampling errors - Jambi, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.132	0.024	866	416	2.109	0.184	0.084	0.181
No education	0.179	0.064	866	416	4.936	0.359	0.050	0.308
With secondary education or higher	0.266	0.046	866	416	3.077	0.174	0.174	0.359
Currently married	0.917	0.014	866	416	1.486	0.015	0.889	0.945
Married before age 20	0.710	0.031	822	385	1.952	0.044	0.648	0.772
Had first sexual intercourse before 18	0.539	0.048	822	385	2.756	0.089	0.443	0.635
Children ever born	2.965	0.160	802	382	1.922	0.054	2.644	3.286
Children ever born to women over 40	5.049	0.452	162	72	1.913	0.089	4.146	5.953
Children surviving	2.621	0.076	802	382	1.149	0.029	2.468	2.774
Knowing any contraceptive method	0.972	0.014	802	382	2.458	0.015	0.943	1.000
Knowing any modern contraceptive method	0.971	0.014	802	382	2.399	0.015	0.943	0.999
Ever used any contraceptive method	0.772	0.020	802	382	1.348	0.026	0.732	0.812
Currently using any method	0.618	0.020	802	382	1.162	0.032	0.578	0.658
Currently using a modern method	0.603	0.021	802	382	1.217	0.035	0.561	0.645
Currently using pill	0.284	0.053	802	382	3.353	0.188	0.177	0.391
Currently using IUD	0.081	0.015	802	382	1.573	0.187	0.051	0.112
Currently using injection	0.193	0.021	802	382	1.516	0.110	0.151	0.235
Currently using implants	0.033	0.009	802	382	1.445	0.278	0.015	0.051
Currently using condom	0.005	0.002	802	382	0.965	0.484	0.000	0.010
Currently using female sterilization	0.007	0.003	802	382	0.907	0.381	0.002	0.012
Currently using male sterilization	0.000	0.000	802	382	NA	NA	0.000	0.000
Currently using periodic abstinence	0.007	0.003	802	382	1.064	0.459	0.001	0.013
Currently using withdrawal	0.005	0.003	802	382	0.995	0.480	0.000	0.010
Using public sector source	0.504	0.037	469	230	1.594	0.073	0.431	0.578
Want no more children	0.488	0.021	802	382	1.213	0.044	0.445	0.531
Want to delay at least 2 years	0.215	0.015	802	382	1.040	0.070	0.185	0.245
Ideal number of children	3.142	0.167	693	337	3.065	0.053	2.808	3.477
Mothers received tetanus injection	0.574	0.099	494	247	3.904	0.172	0.377	0.772
Mothers received medical care at birth	0.450	0.091	494	247	3.575	0.202	0.268	0.632
Had diarrhea in the last 2 weeks	0.082	0.017	465	235	1.319	0.202	0.049	0.115
Treated with ORS packets	0.647	0.108	40	19	1.407	0.167	0.431	0.863
Sought medical treatment	0.515	0.121	40	19	1.492	0.235	0.273	0.757
Having health card	0.236	0.070	96	51	1.702	0.296	0.096	0.376
Received BCG vaccination	0.652	0.179	96	51	3.895	0.275	0.293	1.000
Received DPT vaccination (3 doses)	0.507	0.135	96	51	2.783	0.265	0.238	0.776
Received polio vaccination (3 doses)	0.823	0.030	96	51	0.805	0.036	0.764	0.883
Received measles vaccination	0.531	0.142	96	51	2.937	0.267	0.247	0.814
Fully immunized	0.413	0.109	96	51	2.292	0.264	0.194	0.631
Total fertility rate (3 years)	2.887	0.164	NA	1542	1.192	0.057	2.560	3.215
Neonatal mortality rate (0-9 years)	36.830	17.459	1006	523	3.167	0.474	1.912	71.748
Infant mortality rate (0-9 years)	68.256	17.325	1006	523	2.216	0.254	33.605	102.906
Child mortality rate (0-9 years)	15.186	5.213	1011	525	1.534	0.343	4.759	25.612
Under-five mortality rate (0-9 years)	82.405	18.189	1011	525	1.816	0.221	46.027	118.783
Postneonatal mortality rate (0-9 years)	31.426	4.623	1006	523	0.756	0.147	22.180	40.671

NA = Not applicable



Table B.2.25 Sampling errors - Bengkulu, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.223	0.013	763	192	0.885	0.060	0.196	0.249
No education	0.102	0.013	763	192	1.220	0.132	0.075	0.128
With secondary education or higher	0.338	0.027	763	192	1.571	0.080	0.284	0.391
Currently married	0.943	0.012	763	192	1.445	0.013	0.919	0.967
Married before age 20	0.705	0.023	733	185	1.352	0.032	0.660	0.751
Had first sexual intercourse before 18	0.493	0.032	733	185	1.713	0.064	0.430	0.556
Children ever born	3.513	0.139	720	181	1.554	0.039	3.235	3.790
Children ever born to women over 40	5.784	0.257	155	39	1.256	0.044	5.269	6.298
Children surviving	3.001	0.079	720	181	1.114	0.026	2.843	3.159
Knowing any contraceptive method	0.999	0.001	720	181	0.938	0.001	0.996	1.000
Knowing any modern contraceptive method	0.999	0.001	720	181	0.938	0.001	0.996	1.000
Ever used any contraceptive method	0.884	0.019	720	181	1.600	0.022	0.845	0.922
Currently using any method	0.666	0.028	720	181	1.602	0.042	0.610	0.723
Currently using a modern method	0.623	0.029	720	181	1.582	0.046	0.566	0.681
Currently using pill	0.186	0.026	720	181	1.805	0.141	0.133	0.238
Currently using IUD	0.083	0.014	720	181	1.395	0.173	0.055	0.112
Currently using injection	0.200	0.018	720	181	1.217	0.091	0.164	0.236
Currently using implants	0.125	0.022	720	181	1.820	0.180	0.080	0.170
Currently using condom	0.008	0.004	720	181	1.167	0.470	0.001	0.016
Currently using female sterilization	0.017	0.007	720	181	1.392	0.390	0.004	0.031
Currently using male sterilization	0.004	0.002	720	181	0.952	0.591	0.000	0.008
Currently using periodic abstinence	0.018	0.007	720	181	1.481	0.410	0.003	0.032
Currently using withdrawal	0.019	0.007	720	181	1.292	0.348	0.006	0.032
Using public sector source	0.403	0.036	452	113	1.537	0.088	0.332	0.474
Want no more children	0.546	0.021	720	181	1.113	0.038	0.505	0.587
Want to delay at least 2 years	0.232	0.013	720	181	0.817	0.055	0.206	0.258
Ideal number of children	3.130	0.073	590	149	1.399	0.023	2.984	3.275
Mothers received tetanus injection	0.726	0.031	465	117	1.327	0.042	0.665	0.787
Mothers received medical care at birth	0.545	0.041	465	117	1.558	0.075	0.463	0.627
Had diarrhea in the last 2 weeks	0.165	0.023	430	107	1.186	0.138	0.119	0.210
Treated with ORS packets	0.479	0.069	68	18	1.081	0.144	0.341	0.617
Sought medical treatment	0.456	0.051	68	18	0.817	0.111	0.355	0.557
Having health card	0.327	0.062	81	20	1.166	0.189	0.203	0.450
Received BCG vaccination	0.884	0.049	81	20	1.347	0.055	0.787	0.981
Received DPT vaccination (3 doses)	0.645	0.056	81	20	1.041	0.087	0.533	0.758
Received polio vaccination (3 doses)	0.800	0.039	81	20	0.858	0.048	0.722	0.877
Received measles vaccination	0.739	0.061	81	20	1.228	0.082	0.617	0.861
Fully immunized	0.552	0.052	81	20	0.929	0.094	0.447	0.656
Total fertility rate (3 years)	2.974	0.135	NA	726	1.086	0.045	2.704	3.244
Neonatal mortality rate (0-9 years)	34.142	7.442	1075	274	1.134	0.218	19.257	49.027
Infant mortality rate (0-9 years)	72.347	11.569	1078	275	1.250	0.160	49.208	95.485
Child mortality rate (0-9 years)	46.172	11.772	1090	278	1.336	0.255	22.627	69.717
Under-five mortality rate (0-9 years)	115.179	20.200	1093	279	1.628	0.175	74.779	155.578
Postneonatal mortality rate (0-9 years)	38.205	7.001	1078	275	1.017	0.183	24.203	52.207

NA = Not applicable

Table B.2.26 Sampling errors - East Nusa Tenggara, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.082	0.012	833	489	1.303	0.151	0.058	0.107
No education	0.156	0.021	833	489	1.694	0.137	0.113	0.198
With secondary education or higher	0.233	0.028	833	489	1.926	0.121	0.176	0.289
Currently married	0.913	0.013	833	489	1.316	0.014	0.888	0.939
Married before age 20	0.420	0.025	810	475	1.413	0.058	0.371	0.469
Had first sexual intercourse before 18	0.259	0.018	810	475	1.190	0.071	0.222	0.296
Children ever born	3.337	0.107	761	446	1.204	0.032	3.123	3.550
Children ever born to women over 40	5.366	0.219	199	115	1.170	0.041	4.928	5.805
Children surviving	2.950	0.094	761	446	1.214	0.032	2.763	3.138
Knowing any contraceptive method	0.932	0.014	761	446	1.582	0.016	0.903	0.961
Knowing any modern contraceptive method	0.928	0.014	761	446	1.522	0.015	0.899	0.956
Ever used any contraceptive method	0.609	0.024	761	446	1.345	0.039	0.561	0.656
Currently using any method	0.393	0.031	761	446	1.733	0.078	0.332	0.454
Currently using a modern method	0.352	0.029	761	446	1.702	0.084	0.293	0.411
Currently using pill	0.044	0.010	761	446	1.309	0.221	0.025	0.064
Currently using IUD	0.053	0.014	761	446	1.687	0.258	0.026	0.081
Currently using injection	0.193	0.022	761	446	1.566	0.116	0.148	0.238
Currently using implants	0.030	0.010	761	446	1.670	0.344	0.009	0.051
Currently using condom	0.000	0.000	761	446	NA	NA	0.000	0.000
Currently using female sterilization	0.022	0.007	761	446	1.317	0.317	0.008	0.036
Currently using male sterilization	0.010	0.005	761	446	1.349	0.488	0.000	0.020
Currently using periodic abstinence	0.027	0.008	761	446	1.284	0.278	0.012	0.043
Currently using withdrawal	0.011	0.004	761	446	1.043	0.355	0.003	0.019
Using public sector source	0.710	0.053	269	157	1.898	0.074	0.604	0.815
Want no more children	0.404	0.019	761	446	1.048	0.046	0.366	0.441
Want to delay at least 2 years	0.306	0.018	761	446	1.073	0.059	0.270	0.342
Ideal number of children	3.693	0.095	660	388	1.526	0.026	3.504	3.882
Mothers received tetanus injection	0.818	0.027	621	367	1.556	0.033	0.764	0.872
Mothers received medical care at birth	0.305	0.031	621	367	1.437	0.101	0.244	0.367
Had diarrhea in the last 2 weeks	0.135	0.020	582	343	1.279	0.146	0.096	0.174
Treated with ORS packets	0.683	0.068	76	46	1.228	0.099	0.547	0.818
Sought medical treatment	0.759	0.060	76	46	1.198	0.079	0.640	0.878
Having health card	0.158	0.039	124	75	1.213	0.248	0.080	0.237
Received BCG vaccination	0.954	0.021	124	75	1.156	0.022	0.911	0.997
Received DPT vaccination (3 doses)	0.725	0.044	124	75	1.102	0.060	0.638	0.813
Received polio vaccination (3 doses)	0.844	0.038	124	75	1.183	0.045	0.767	0.920
Received measles vaccination	0.855	0.033	124	75	1.058	0.039	0.789	0.921
Fully immunized	0.593	0.050	124	75	1.132	0.084	0.493	0.692
Total fertility rate (3 years)	3.449	0.196	NA	2051	1.189	0.057	3.057	3.841
Neonatal mortality rate (0-9 years)	29.318	6.292	1272	750	1.208	0.215	16.734	41.903
Infant mortality rate (0-9 years)	59.690	9.286	1274	751	1.309	0.156	41.118	78.263
Child mortality rate (0-9 years)	32.312	6.335	1276	752	1.161	0.196	19.641	44.983
Under-five mortality rate (0-9 years)	90.074	11.670	1278	754	1.258	0.130	66.735	113.413
Postneonatal mortality rate (0-9 years)	30.372	6.016	1274	751	1.193	0.198	18.341	42.403

NA = Not applicable



Table B.2.27 Sampling errors - East Timor, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.082	0.009	920	120	0.982	0.109	0.064	0.099
No education	0.540	0.030	920	120	1.832	0.056	0.480	0.600
With secondary education or higher	0.206	0.027	920	120	2.027	0.131	0.152	0.260
Currently married	0.964	0.007	920	120	1.168	0.007	0.949	0.978
Married before age 20	0.441	0.017	907	119	1.059	0.040	0.406	0.476
Had first sexual intercourse before 18	0.260	0.013	907	119	0.920	0.052	0.233	0.287
Children ever born	3.343	0.097	885	116	1.308	0.029	3.149	3.536
Children ever born to women over 40	4.470	0.212	180	23	1.202	0.047	4.046	4.894
Children surviving	3.153	0.090	885	116	1.295	0.029	2.973	3.334
Knowing any contraceptive method	0.628	0.037	885	116	2.267	0.059	0.554	0.702
Knowing any modern contraceptive method	0.620	0.038	885	116	2.349	0.062	0.543	0.697
Ever used any contraceptive method	0.376	0.032	885	116	1.963	0.085	0.312	0.440
Currently using any method	0.267	0.029	885	116	1.932	0.108	0.210	0.324
Currently using a modern method	0.251	0.030	885	116	2.026	0.118	0.192	0.310
Currently using pill	0.019	0.007	885	116	1.485	0.361	0.005	0.032
Currently using IUD	0.018	0.005	885	116	1.118	0.276	0.008	0.028
Currently using injection	0.177	0.022	885	116	1.693	0.123	0.133	0.220
Currently using implants	0.025	0.008	885	116	1.458	0.308	0.009	0.040
Currently using condom	0.000	0.000	885	116	NA	NA	0.000	0.000
Currently using female sterilization	0.012	0.005	885	116	1.375	0.417	0.002	0.022
Currently using male sterilization	0.000	0.000	885	116	NA	NA	0.000	0.000
Currently using periodic abstinence	0.012	0.006	885	116	1.527	0.466	0.001	0.023
Currently using withdrawal	0.000	0.000	885	116	NA	NA	0.000	0.000
Using public sector source	0.896	0.024	216	29	1.129	0.026	0.848	0.943
Want no more children	0.257	0.018	885	116	1.202	0.069	0.222	0.293
Want to delay at least 2 years	0.302	0.017	885	116	1.121	0.057	0.268	0.337
Ideal number of children	4.787	0.133	614	79	1.913	0.028	4.521	5.054
Mothers received tetanus injection	0.553	0.033	890	116	1.542	0.060	0.487	0.619
Mothers received medical care at birth	0.262	0.044	890	116	2.375	0.168	0.174	0.350
Had diarrhea in the last 2 weeks	0.060	0.009	862	113	1.015	0.143	0.043	0.077
Treated with ORS packets	0.772	0.050	52	7	0.804	0.065	0.672	0.873
Sought medical treatment	0.725	0.056	52	7	0.854	0.078	0.613	0.838
Having health card	0.086	0.027	154	21	1.223	0.320	0.031	0.140
Received BCG vaccination	0.775	0.036	154	21	1.086	0.047	0.703	0.848
Received DPT vaccination (3 doses)	0.633	0.044	154	21	1.135	0.069	0.545	0.720
Received polio vaccination (3 doses)	0.586	0.041	154	21	1.050	0.071	0.503	0.669
Received measles vaccination	0.690	0.038	154	21	1.024	0.055	0.615	0.766
Fully immunized	0.556	0.038	154	21	0.957	0.068	0.480	0.632
Total fertility rate (3 years)	4.435	0.289	NA	488	1.360	0.065	3.857	5.012
Neonatal mortality rate (0-9 years)	14.305	2.941	1834	239	1.001	0.206	8.423	20.187
Infant mortality rate (0-9 years)	32.757	4.356	1836	239	0.948	0.133	24.045	41.468
Child mortality rate (0-9 years)	16.961	3.653	1841	239	1.166	0.215	9.654	24.267
Under-five mortality rate (0-9 years)	49.162	5.886	1843	240	1.064	0.120	37.391	60.933
Postneonatal mortality rate (0-9 years)	18.452	3.077	1836	239	0.932	0.167	12.299	24.606

NA = Not applicable



Table B.2.28 Sampling errors - Central Kalimantan, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.150	0.021	765	238	1.604	0.138	0.109	0.192
No education	0.078	0.024	765	238	2.447	0.305	0.030	0.125
With secondary education or higher	0.309	0.031	765	238	1.882	0.102	0.246	0.371
Currently married	0.932	0.009	765	238	0.970	0.009	0.914	0.950
Married before age 20	0.681	0.024	730	226	1.385	0.035	0.633	0.729
Had first sexual intercourse before 18	0.426	0.021	730	226	1.125	0.048	0.384	0.467
Children ever born	2.905	0.059	715	222	0.790	0.020	2.786	3.024
Children ever born to women over 40	4.405	0.240	120	38	1.195	0.055	3.925	4.885
Children surviving	2.671	0.059	715	222	0.876	0.022	2.553	2.790
Knowing any contraceptive method	0.953	0.014	715	222	1.738	0.014	0.926	0.981
Knowing any modern contraceptive method	0.947	0.015	715	222	1.755	0.016	0.917	0.976
Ever used any contraceptive method	0.805	0.020	715	222	1.375	0.025	0.765	0.846
Currently using any method	0.633	0.031	715	222	1.716	0.049	0.571	0.695
Currently using a modern method	0.570	0.040	715	222	2.145	0.070	0.491	0.650
Currently using pill	0.343	0.022	715	222	1.228	0.064	0.300	0.387
Currently using IUD	0.001	0.001	715	222	0.944	0.998	0.000	0.004
Currently using injection	0.204	0.027	715	222	1.772	0.131	0.150	0.257
Currently using implants	0.016	0.005	715	222	1.177	0.351	0.005	0.026
Currently using condom	0.001	0.001	715	222	0.983	1.007	0.000	0.004
Currently using female sterilization	0.005	0.002	715	222	0.869	0.445	0.001	0.010
Currently using male sterilization	0.000	0.000	715	222	NA	NA	0.000	0.000
Currently using periodic abstinence	0.004	0.002	715	222	0.974	0.585	0.000	0.008
Currently using withdrawal	0.001	0.001	715	222	0.696	1.015	0.000	0.002
Using public sector source	0.741	0.032	421	127	1.521	0.044	0.676	0.806
Want no more children	0.491	0.018	715	222	0.988	0.038	0.454	0.528
Want to delay at least 2 years	0.232	0.029	715	222	1.865	0.127	0.173	0.291
Ideal number of children	3.160	0.074	640	196	1.453	0.024	3.011	3.309
Mothers received tetanus injection	0.634	0.051	490	153	2.010	0.080	0.532	0.736
Mothers received medical care at birth	0.480	0.045	490	153	1.715	0.094	0.390	0.569
Had diarrhea in the last 2 weeks	0.194	0.036	462	145	1.888	0.187	0.122	0.267
Treated with ORS packets	0.563	0.056	84	28	0.990	0.099	0.452	0.674
Sought medical treatment	0.684	0.056	84	28	1.067	0.082	0.572	0.797
Having health card	0.285	0.040	78	24	0.765	0.139	0.205	0.364
Received BCG vaccination	0.896	0.029	78	24	0.842	0.033	0.838	0.955
Received DPT vaccination (3 doses)	0.559	0.088	78	24	1.531	0.157	0.383	0.735
Received polio vaccination (3 doses)	0.691	0.045	78	24	0.830	0.065	0.602	0.781
Received measles vaccination	0.830	0.049	78	24	1.143	0.059	0.732	0.929
Fully immunized	0.490	0.080	78	24	1.388	0.163	0.329	0.650
Total fertility rate (3 years)	2.725	0.205	NA	900	1.413	0.075	2.316	3.134
Neonatal mortality rate (0-9 years)	29.373	7.656	1099	340	1.352	0.261	14.061	44.684
Infant mortality rate (0-9 years)	55.311	10.624	1102	341	1.383	0.192	34.063	76.558
Child mortality rate (0-9 years)	14.437	4.255	1102	341	1.028	0.295	5.926	22.947
Under-five mortality rate (0-9 years)	68.949	12.301	1106	342	1.404	0.178	44.347	93.550
Postneonatal mortality rate (0-9 years)	25.938	5.753	1101	341	1.161	0.222	14.431	37.445

NA = Not applicable

Table B.2.29 Sampling errors - East Kalimantan, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.493	0.037	856	363	2.174	0.075	0.419	0.567
No education	0.064	0.011	856	363	1.365	0.178	0.041	0.087
With secondary education or higher	0.449	0.037	856	363	2.199	0.083	0.374	0.524
Currently married	0.949	0.007	856	363	0.982	0.008	0.934	0.964
Married before age 20	0.601	0.037	818	348	2.155	0.061	0.527	0.675
Had first sexual intercourse before 18	0.412	0.029	818	348	1.700	0.071	0.354	0.471
Children ever born	2.883	0.085	804	345	1.111	0.030	2.712	3.054
Children ever born to women over 40	5.207	0.265	192	77	1.495	0.051	4.677	5.737
Children surviving	2.603	0.059	804	345	0.913	0.023	2.485	2.721
Knowing any contraceptive method	0.997	0.001	804	345	0.595	0.001	0.995	0.999
Knowing any modern contraceptive method	0.996	0.002	804	345	0.961	0.002	0.992	1.000
Ever used any contraceptive method	0.826	0.023	804	345	1.748	0.028	0.779	0.873
Currently using any method	0.593	0.033	804	345	1.878	0.055	0.528	0.658
Currently using a modern method	0.545	0.025	804	345	1.442	0.046	0.494	0.596
Currently using pill	0.243	0.021	804	345	1.403	0.087	0.201	0.286
Currently using IUD	0.096	0.015	804	345	1.451	0.157	0.066	0.126
Currently using injection	0.140	0.009	804	345	0.708	0.062	0.123	0.157
Currently using implants	0.022	0.006	804	345	1.232	0.293	0.009	0.034
Currently using condom	0.012	0.005	804	345	1.193	0.376	0.003	0.022
Currently using female sterilization	0.031	0.008	804	345	1.260	0.250	0.015	0.046
Currently using male sterilization	0.002	0.002	804	345	1.168	0.999	0.000	0.005
Currently using periodic abstinence	0.026	0.010	804	345	1.724	0.370	0.007	0.046
Currently using withdrawal	0.003	0.003	804	345	1.516	0.948	0.000	0.009
Using public sector source	0.479	0.047	440	189	1.984	0.099	0.384	0.574
Want no more children	0.452	0.021	804	345	1.171	0.046	0.411	0.493
Want to delay at least 2 years	0.240	0.019	804	345	1.252	0.079	0.203	0.278
Ideal number of children	2.874	0.078	691	295	1.504	0.027	2.719	3.030
Mothers received tetanus injection	0.861	0.024	508	223	1.456	0.028	0.813	0.908
Mothers received medical care at birth	0.680	0.057	508	223	2.404	0.083	0.567	0.793
Had diarrhea in the last 2 weeks	0.123	0.017	478	211	1.151	0.143	0.088	0.158
Treated with ORS packets	0.410	0.050	65	26	0.759	0.123	0.310	0.511
Sought medical treatment	0.394	0.069	65	26	1.074	0.176	0.255	0.533
Having health card	0.279	0.041	90	36	0.849	0.148	0.197	0.362
Received BCG vaccination	0.957	0.021	90	36	0.954	0.022	0.915	0.999
Received DPT vaccination (3 doses)	0.846	0.055	90	36	1.402	0.065	0.737	0.956
Received polio vaccination (3 doses)	0.911	0.026	90	36	0.849	0.029	0.858	0.963
Received measles vaccination	0.864	0.041	90	36	1.100	0.047	0.782	0.945
Fully immunized	0.785	0.068	90	36	1.536	0.087	0.648	0.921
Total fertility rate (3 years)	2.848	0.156	NA	1386	1.255	0.055	2.536	3.160
Neonatal mortality rate (0-9 years)	29.297	6.389	1047	444	1.105	0.218	16.519	42.076
Infant mortality rate (0-9 years)	50.676	7.588	1048	444	1.038	0.150	35.500	65.851
Child mortality rate (0-9 years)	16.359	5.703	1050	446	1.479	0.349	4.954	27.764
Under-five mortality rate (0-9 years)	66.206	10.824	1051	446	1.228	0.163	44.559	87.853
Postneonatal mortality rate (0-9 years)	21.378	5.242	1048	444	1.132	0.245	10.895	31.862

NA = Not applicable



Table B.2.30 Sampling errors - Central Sulawesi, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.132	0.011	880	270	1.006	0.087	0.109	0.155
No education	0.039	0.012	880	270	1.903	0.319	0.014	0.064
With secondary education or higher	0.372	0.035	880	270	2.123	0.093	0.302	0.441
Currently married	0.929	0.007	880	270	0.820	0.008	0.915	0.943
Married before age 20	0.586	0.023	836	257	1.347	0.039	0.540	0.632
Had first sexual intercourse before 18	0.353	0.020	836	257	1.218	0.057	0.313	0.393
Children ever born	2.898	0.091	816	251	1.216	0.031	2.715	3.080
Children ever born to women over 40	5.041	0.183	170	52	0.972	0.036	4.675	5.407
Children surviving	2.502	0.078	816	251	1.248	0.031	2.346	2.659
Knowing any contraceptive method	0.981	0.013	816	251	2.665	0.013	0.956	1.000
Knowing any modern contraceptive method	0.981	0.013	816	251	2.665	0.013	0.956	1.000
Ever used any contraceptive method	0.733	0.025	816	251	1.605	0.034	0.683	0.782
Currently using any method	0.517	0.026	816	251	1.471	0.050	0.465	0.568
Currently using a modern method	0.502	0.027	816	251	1.534	0.054	0.448	0.556
Currently using pill	0.181	0.019	816	251	1.440	0.107	0.142	0.219
Currently using IUD	0.036	0.006	816	251	0.925	0.167	0.024	0.048
Currently using injection	0.205	0.019	816	251	1.327	0.092	0.167	0.242
Currently using implants	0.067	0.012	816	251	1.348	0.177	0.043	0.090
Currently using condom	0.001	0.001	816	251	1.054	1.001	0.000	0.004
Currently using female sterilization	0.012	0.003	816	251	0.800	0.252	0.006	0.018
Currently using male sterilization	0.000	0.000	816	251	NA	NA	0.000	0.000
Currently using periodic abstinence	0.007	0.003	816	251	1.083	0.467	0.000	0.013
Currently using withdrawal	0.002	0.002	816	251	0.968	0.712	0.000	0.005
Using public sector source	0.601	0.039	400	126	1.606	0.066	0.522	0.679
Want no more children	0.418	0.020	816	251	1.145	0.047	0.379	0.458
Want to delay at least 2 years	0.246	0.016	816	251	1.051	0.064	0.215	0.278
Ideal number of children	2.886	0.062	608	187	1.363	0.021	2.763	3.010
Mothers received tetanus injection	0.725	0.044	575	177	1.963	0.060	0.637	0.812
Mothers received medical care at birth	0.315	0.033	575	177	1.452	0.105	0.249	0.380
Had diarrhea in the last 2 weeks	0.065	0.010	525	161	0.948	0.155	0.045	0.085
Treated with ORS packets	0.428	0.112	34	11	1.329	0.263	0.203	0.653
Sought medical treatment	0.486	0.109	34	11	1.275	0.224	0.268	0.704
Having health card	0.313	0.062	109	33	1.381	0.198	0.189	0.437
Received BCG vaccination	0.856	0.043	109	33	1.285	0.051	0.769	0.943
Received DPT vaccination (3 doses)	0.706	0.051	109	33	1.148	0.072	0.605	0.807
Received polio vaccination (3 doses)	0.733	0.050	109	33	1.182	0.069	0.632	0.834
Received measles vaccination	0.727	0.050	109	33	1.114	0.068	0.628	0.827
Fully immunized	0.610	0.054	109	33	1.130	0.089	0.501	0.718
Total fertility rate (3 years)	3.041	0.191	NA	1075	1.343	0.063	2.659	3.423
Neonatal mortality rate (0-9 years)	43.745	7.272	1166	364	1.095	0.166	29.201	58.288
Infant mortality rate (0-9 years)	94.508	12.514	1168	364	1.213	0.132	69.479	119.536
Child mortality rate (0-9 years)	29.717	6.101	1174	366	1.041	0.205	17.514	41.919
Under-five mortality rate (0-9 years)	121.416	14.708	1176	367	1.269	0.121	91.999	150.832
Postneonatal mortality rate (0-9 years)	50.763	9.974	1168	364	1.317	0.196	30.814	70.711

NA = Not applicable



Table B.2.31 Sampling errors - Southeast Sulawesi, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.167	0.010	731	178	0.720	0.059	0.147	0.187
No education	0.094	0.015	731	178	1.421	0.163	0.063	0.125
With secondary education or higher	0.416	0.037	731	178	2.032	0.089	0.342	0.490
Currently married	0.943	0.009	731	178	0.993	0.009	0.925	0.960
Married before age 20	0.644	0.022	692	168	1.230	0.035	0.600	0.689
Had first sexual intercourse before 18	0.421	0.029	692	168	1.531	0.068	0.364	0.479
Children ever born	3.215	0.072	689	168	0.831	0.023	3.070	3.359
Children ever born to women over 40	5.282	0.282	152	36	1.473	0.053	4.718	5.846
Children surviving	2.894	0.062	689	168	0.820	0.021	2.770	3.018
Knowing any contraceptive method	0.958	0.011	689	168	1.441	0.012	0.936	0.980
Knowing any modern contraceptive method	0.953	0.011	689	168	1.373	0.012	0.931	0.975
Ever used any contraceptive method	0.722	0.022	689	168	1.297	0.031	0.678	0.767
Currently using any method	0.531	0.022	689	168	1.134	0.041	0.488	0.574
Currently using a modern method	0.467	0.021	689	168	1.091	0.044	0.425	0.508
Currently using pill	0.140	0.015	689	168	1.115	0.105	0.111	0.170
Currently using IUD	0.026	0.007	689	168	1.164	0.270	0.012	0.041
Currently using injection	0.172	0.014	689	168	0.939	0.079	0.145	0.199
Currently using implants	0.109	0.015	689	168	1.275	0.139	0.079	0.139
Currently using condom	0.003	0.002	689	168	0.979	0.708	0.000	0.007
Currently using female sterilization	0.014	0.007	689	168	1.446	0.458	0.001	0.027
Currently using male sterilization	0.002	0.002	689	168	1.064	0.991	0.000	0.005
Currently using periodic abstinence	0.035	0.007	689	168	1.056	0.213	0.020	0.049
Currently using withdrawal	0.026	0.008	689	168	1.292	0.300	0.010	0.042
Using public sector source	0.588	0.042	324	79	1.517	0.071	0.505	0.671
Want no more children	0.417	0.025	689	168	1.329	0.060	0.367	0.467
Want to delay at least 2 years	0.308	0.020	689	168	1.110	0.063	0.269	0.347
Ideal number of children	3.379	0.084	541	133	1.488	0.025	3.210	3.548
Mothers received tetanus injection	0.813	0.029	485	117	1.393	0.035	0.756	0.871
Mothers received medical care at birth	0.350	0.049	485	117	1.959	0.141	0.252	0.449
Had diarrhea in the last 2 weeks	0.114	0.021	461	111	1.373	0.181	0.073	0.155
Treated with ORS packets	0.421	0.059	49	13	0.856	0.141	0.302	0.540
Sought medical treatment	0.516	0.065	49	13	0.922	0.126	0.386	0.647
Having health card	0.318	0.060	96	23	1.222	0.189	0.198	0.439
Received BCG vaccination	0.948	0.020	96	23	0.864	0.021	0.908	0.987
Received DPT vaccination (3 doses)	0.839	0.032	96	23	0.849	0.038	0.774	0.903
Received polio vaccination (3 doses)	0.850	0.032	96	23	0.875	0.038	0.785	0.914
Received measles vaccination	0.844	0.042	96	23	1.123	0.050	0.760	0.928
Fully immunized	0.789	0.045	96	23	1.070	0.057	0.699	0.879
Total fertility rate (3 years)	2.921	0.205	NA	735	1.256	0.070	2.512	3.330
Neonatal mortality rate (0-9 years)	26.373	5.650	1057	258	1.131	0.214	15.072	37.673
Infant mortality rate (0-9 years)	78.124	11.036	1061	259	1.170	0.141	56.051	100.196
Child mortality rate (0-9 years)	17.395	4.683	1062	259	1.118	0.269	8.030	26.761
Under-five mortality rate (0-9 years)	94.160	11.710	1066	260	1.134	0.124	70.740	117.580
Postneonatal mortality rate (0-9 years)	51.751	9.094	1061	259	1.212	0.176	33.563	69.939

NA = Not applicable

Table B.2.32 Sampling errors - Maluku, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.186	0.009	809	235	0.631	0.046	0.169	0.203
No education	0.044	0.008	809	235	1.112	0.183	0.028	0.060
With secondary education or higher	0.451	0.022	809	235	1.243	0.048	0.407	0.494
Currently married	0.936	0.012	809	235	1.439	0.013	0.911	0.961
Married before age 20	0.459	0.019	786	229	1.047	0.041	0.422	0.497
Had first sexual intercourse before 18	0.266	0.020	786	229	1.282	0.076	0.226	0.307
Children ever born	3.178	0.073	758	220	0.941	0.023	3.033	3.323
Children ever born to women over 40	4.829	0.189	169	49	1.069	0.039	4.451	5.207
Children surviving	2.993	0.070	758	220	0.976	0.024	2.852	3.134
Knowing any contraceptive method	0.927	0.020	758	220	2.098	0.021	0.888	0.967
Knowing any modern contraceptive method	0.926	0.020	758	220	2.080	0.021	0.886	0.965
Ever used any contraceptive method	0.557	0.025	758	220	1.371	0.044	0.508	0.607
Currently using any method	0.401	0.027	758	220	1.509	0.067	0.347	0.455
Currently using a modern method	0.361	0.026	758	220	1.497	0.072	0.309	0.413
Currently using pill	0.099	0.014	758	220	1.291	0.142	0.071	0.127
Currently using IUD	0.040	0.012	758	220	1.639	0.290	0.017	0.064
Currently using injection	0.170	0.022	758	220	1.625	0.131	0.125	0.214
Currently using implants	0.035	0.008	758	220	1.215	0.232	0.019	0.051
Currently using condom	0.000	0.000	758	220	NA	NA	0.000	0.000
Currently using female sterilization	0.014	0.003	758	220	0.666	0.200	0.009	0.020
Currently using male sterilization	0.003	0.002	758	220	1.045	0.726	0.000	0.007
Currently using periodic abstinence	0.017	0.004	758	220	0.970	0.272	0.008	0.026
Currently using withdrawal	0.000	0.000	758	220	NA	NA	0.000	0.000
Using public sector source	0.667	0.053	278	80	1.862	0.079	0.561	0.772
Want no more children	0.533	0.018	758	220	0.969	0.033	0.498	0.568
Want to delay at least 2 years	0.156	0.013	758	220	1.010	0.085	0.129	0.183
Ideal number of children	3.167	0.063	634	184	1.473	0.020	3.041	3.293
Mothers received tetanus injection	0.576	0.034	594	173	1.377	0.060	0.507	0.645
Mothers received medical care at birth	0.305	0.027	594	173	1.197	0.090	0.250	0.359
Had diarrhea in the last 2 weeks	0.040	0.009	570	166	1.077	0.222	0.022	0.058
Treated with ORS packets	0.436	0.090	23	7	0.860	0.205	0.257	0.615
Sought medical treatment	0.475	0.071	23	7	0.677	0.149	0.333	0.617
Having health card	0.299	0.065	113	32	1.481	0.218	0.169	0.428
Received BCG vaccination	0.835	0.043	113	32	1.201	0.051	0.750	0.920
Received DPT vaccination (3 doses)	0.644	0.047	113	32	1.021	0.073	0.550	0.738
Received polio vaccination (3 doses)	0.697	0.046	113	32	1.041	0.066	0.605	0.789
Received measles vaccination	0.766	0.045	113	32	1.112	0.059	0.676	0.856
Fully immunized	0.603	0.044	113	32	0.927	0.072	0.515	0.690
Total fertility rate (3 years)	3.308	0.185	NA	978	1.126	0.056	2.939	3.677
Neonatal mortality rate (0-9 years)	11.114	3.872	1286	372	1.162	0.348	3.371	18.858
Infant mortality rate (0-9 years)	29.475	5.601	1286	372	1.099	0.190	18.273	40.677
Child mortality rate (0-9 years)	19.467	7.448	1294	375	1.552	0.383	4.572	34.362
Under-five mortality rate (0-9 years)	48.368	8.939	1294	375	1.304	0.185	30.490	66.246
Postneonatal mortality rate (0-9 years)	18.360	2.971	1286	372	0.784	0.162	12.419	24.302

NA = Not applicable



Table B.2.33 Sampling errors - Irian Jaya, Indonesia 1997

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
Urban residence	0.213	0.018	794	242	1.253	0.086	0.177	0.249
No education	0.221	0.027	794	242	1.815	0.121	0.168	0.275
With secondary education or higher	0.364	0.031	794	242	1.837	0.086	0.301	0.427
Currently married	0.964	0.006	794	242	0.905	0.006	0.952	0.976
Married before age 20	0.625	0.027	760	231	1.512	0.042	0.572	0.679
Had first sexual intercourse before 18	0.447	0.029	760	231	1.608	0.065	0.389	0.505
Children ever born	3.126	0.126	766	233	1.581	0.040	2.874	3.379
Children ever born to women over 40	4.997	0.250	164	49	1.295	0.050	4.498	5.497
Children surviving	2.807	0.101	766	233	1.448	0.036	2.606	3.008
Knowing any contraceptive method	0.981	0.005	766	233	0.913	0.005	0.972	0.990
Knowing any modern contraceptive method	0.957	0.007	766	233	0.983	0.008	0.943	0.971
Ever used any contraceptive method	0.693	0.030	766	233	1.829	0.044	0.633	0.754
Currently using any method	0.504	0.034	766	233	1.887	0.068	0.436	0.572
Currently using a modern method	0.383	0.035	766	233	2.018	0.093	0.312	0.454
Currently using pill	0.087	0.012	766	233	1.200	0.141	0.062	0.111
Currently using IUD	0.041	0.008	766	233	1.141	0.199	0.025	0.058
Currently using injection	0.171	0.015	766	233	1.074	0.086	0.142	0.200
Currently using implants	0.038	0.013	766	233	1.898	0.345	0.012	0.064
Currently using condom	0.005	0.004	766	233	1.598	0.792	0.000	0.014
Currently using female sterilization	0.039	0.010	766	233	1.415	0.255	0.019	0.058
Currently using male sterilization	0.002	0.002	766	233	0.957	0.710	0.000	0.006
Currently using periodic abstinence	0.013	0.002	766	233	0.555	0.178	0.008	0.017
Currently using withdrawal	0.003	0.002	766	233	0.989	0.712	0.000	0.006
Using public sector source	0.760	0.036	295	89	1.456	0.048	0.688	0.833
Want no more children	0.445	0.020	766	233	1.132	0.046	0.405	0.486
Want to delay at least 2 years	0.190	0.020	766	233	1.400	0.105	0.150	0.229
Ideal number of children	3.232	0.129	454	141	1.860	0.040	2.974	3.490
Mothers received tetanus injection	0.784	0.029	570	173	1.422	0.037	0.725	0.843
Mothers received medical care at birth	0.487	0.050	570	173	1.954	0.103	0.386	0.588
Had diarrhea in the last 2 weeks	0.136	0.019	532	162	1.226	0.142	0.097	0.174
Treated with ORS packets	0.727	0.052	73	22	0.929	0.071	0.623	0.831
Sought medical treatment	0.665	0.051	73	22	0.852	0.077	0.562	0.767
Having health card	0.292	0.065	96	28	1.343	0.224	0.161	0.423
Received BCG vaccination	0.950	0.019	96	28	0.837	0.020	0.912	0.988
Received DPT vaccination (3 doses)	0.841	0.041	96	28	1.073	0.049	0.758	0.923
Received polio vaccination (3 doses)	0.878	0.036	96	28	1.038	0.041	0.806	0.949
Received measles vaccination	0.847	0.030	96	28	0.731	0.035	0.788	0.906
Fully immunized	0.776	0.040	96	28	0.874	0.052	0.696	0.856
Total fertility rate (3 years)	3.383	0.263	NA	913	1.297	0.078	2.858	3.908
Neonatal mortality rate (0-9 years)	32.167	6.708	1192	360	1.117	0.209	18.752	45.583
Infant mortality rate (0-9 years)	64.694	11.716	1198	362	1.436	0.181	41.262	88.126
Child mortality rate (0-9 years)	29.476	5.485	1197	362	0.966	0.186	18.507	40.445
Under-five mortality rate (0-9 years)	92.263	14.842	1203	364	1.552	0.161	62.578	121.947
Postneonatal mortality rate (0-9 years)	32.526	7.453	1198	362	1.347	0.229	17.620	47.432

NA = Not applicable





## **APPENDIX C**

### **QUALITY OF THE DATA: NON-SAMPLING ERRORS**





## APPENDIX C

### QUALITY OF THE DATA: NON-SAMPLING ERRORS

This appendix provides an initial assessment of the quality of the 1997 IDHS data. For this purpose, misreporting of ages, respondent's recall problems and other problems encountered during data collection are investigated.

Table C.1 presents the distribution of the household population by single years of age. Contrary to expectation, the proportion of children reported to be five years of age at the time of the survey is smaller than the proportions age four and six. This phenomenon is more significant for males than for females. Heaping is observed in the reporting of ages ending with 0 and 5 in the older ages for both males and females. The overreporting of women at age 50, and to a lesser extent, of females. The overreporting of women at age 50 may reflect age displacement as well as heaping, since age 49 is the upper limit of eligibility for the individual interview.

Table C.1 Household age distribution

Single-year age distribution of the de jure household population by sex (weighted), Indonesia 1997

Age	Males		Females		Age	Males		Females	
	Number	Percent	Number	Percent		Number	Percent	Number	Percent
<1	1,764	2.4	1,567	2.1	37	987	1.3	1,141	1.5
1	1,507	2.1	1,595	2.1	38	912	1.2	918	1.2
2	1,628	2.2	1,488	2.0	39	861	1.2	915	1.2
3	1,636	2.2	1,553	2.1	40	1,386	1.9	1,038	1.4
4	1,661	2.3	1,531	2.1	41	731	1.0	734	1.0
5	1,488	2.0	1,400	1.9	42	949	1.3	898	1.2
6	1,833	2.5	1,721	2.3	43	757	1.0	780	1.1
7	1,834	2.5	1,626	2.2	44	638	0.9	699	0.9
8	1,633	2.2	1,690	2.3	45	1,190	1.6	982	1.3
9	1,590	2.2	1,424	1.9	46	574	0.8	654	0.9
10	1,745	2.4	1,802	2.4	47	677	0.9	684	0.9
11	1,570	2.1	1,512	2.0	48	545	0.7	704	0.9
12	1,855	2.5	1,817	2.4	49	558	0.8	481	0.6
13	1,817	2.5	1,695	2.3	50	797	1.1	649	0.9
14	1,747	2.4	1,669	2.2	51	355	0.5	618	0.8
15	1,768	2.4	1,681	2.3	52	681	0.9	828	1.1
16	1,508	2.1	1,528	2.1	53	420	0.6	457	0.6
17	1,787	2.4	1,510	2.0	54	445	0.6	460	0.6
18	1,468	2.0	1,454	2.0	55	832	1.1	733	1.0
19	1,130	1.5	1,271	1.7	56	361	0.5	390	0.5
20	1,421	1.9	1,548	2.1	57	493	0.7	444	0.6
21	963	1.3	1,197	1.6	58	313	0.4	323	0.4
22	1,146	1.6	1,325	1.8	59	340	0.5	279	0.4
23	1,044	1.4	1,243	1.7	60	747	1.0	785	1.1
24	1,039	1.4	1,182	1.6	61	300	0.4	339	0.5
25	1,513	2.1	1,517	2.0	62	450	0.6	433	0.6
26	992	1.4	1,260	1.7	63	266	0.4	370	0.5
27	1,235	1.7	1,349	1.8	64	228	0.3	245	0.3
28	1,182	1.6	1,223	1.6	65	533	0.7	583	0.8
29	1,024	1.4	1,033	1.4	66	203	0.3	215	0.3
30	1,432	1.9	1,257	1.7	67	344	0.5	301	0.4
31	913	1.2	1,034	1.4	68	188	0.3	196	0.3
32	1,175	1.6	1,296	1.7	69	166	0.2	203	0.3
33	887	1.2	1,047	1.4	70+	1,895	2.6	2,131	2.9
34	869	1.2	1,090	1.5	Don't know,				
35	1,582	2.2	1,476	2.0	Missing	34	0.0	20	0.0
36	916	1.2	971	1.3	Total	73,459	100.0	74,214	100.0

Table C.2 shows that during the household interview, 39,153 women age 15-49 were recorded, among whom 29,203 have been married and are, therefore, eligible for individual interview. Of these women, 28,699 were successfully interviewed, yielding a response rate of 98 percent. The five-year age distribution of women follows the expected pattern. Compared with findings from past surveys, there is a decrease in the proportion of women 15-29, and an increase of the proportion of women 30-34.

Table C.2 Age distribution of eligible and interviewed women							
Percent distribution of the de jure household population of women age 10-54, of ever-married women age 15-49, and of interviewed women age 15-49, and the percentage of eligible women who were interviewed (weighted) by five-year age groups, Indonesia 1997							
Age	Household population of women		Ever-married women		Interviewed women		Percentage of eligible women interviewed (weighted)
	Number	Percent	Number	Percent	Number	Percent	
10-14	8,495	NA	NA	NA	NA	NA	NA
15-19	7,445	19.0	1,344	4.6	1,308	4.6	97.4
20-24	6,495	16.6	4,153	14.2	4,068	14.2	98.0
25-29	6,381	16.3	5,479	18.8	5,415	18.9	98.8
30-34	5,724	14.6	5,419	18.6	5,341	18.6	98.6
35-39	5,421	13.9	5,288	18.1	5,163	18.0	97.6
40-44	4,150	10.6	4,031	13.8	3,976	13.9	98.6
45-49	3,505	9.0	3,449	11.8	3,386	11.8	98.2
50-54	3,013	NA	NA	NA	NA	NA	NA
15-49	39,121	100.0	29,162	100.0	28,657	100.0	98.3

Note: The de jure population includes all usual residents of the household. The number of interviewed women is calculated using the household weights in order to be comparable with the number of ever-married women in the household. Thus, the numbers differ slightly from those shown in the rest of the report, which are based on individual woman weights.  
NA = Not applicable

To investigate the possibility of bias in age reporting in the individual woman's interview, the age distribution of ever-married women (i.e., eligible women) was calculated from the household information and then compared with the age distribution of interviewed women (Table C.2). The expected pattern of declining percentage with increasing age, seen in the household population of women, is not repeated for ever-married women. At the same time, there is virtually no difference in the age distributions of ever-married women and interviewed women. This suggests that there is no bias in age reporting in these populations. Response rates vary slightly by age group.

Information on the completeness of reporting in connection with a set of important variables is provided in Table C.3. Among births in the 15 years preceding the survey, the percentage of cases with missing information on months and year of birth or age at death is extremely low (less than 1 percent). Comparing these percentages in this table and those found in the 1991 and 1994 Indonesia DHS, the reporting of dates is seen to have improved slightly (CBS et al., 1992 and CBS et al., 1995).

Comparing the figures presented in Table C.4 with those in previous Indonesia DHS data also suggests that the reporting of children's date of birth is slightly more complete in 1997 than in previous years.

**Table C.3 Completeness of reporting**

Percentage of observations missing information for selected demographic and health questions (weighted), Indonesia 1997

Subject	Reference group	Percentage missing information	Number of cases
<b>Birth date</b>			
Month only	Births in last 15 years	8.38	49,840
Month and year		0.03	49,840
Age at death	Deaths to births in last 15 years	0.01	3,767
Age/date at first union <sup>1</sup>	Ever-married women	0.01	28,810
Respondent's education	All women	0.00	28,810
Child's size at birth	Births in last 59 months	0.35	10,042
Diarrhea in last 2 weeks	Living children age 0-59 months	1.00	15,433

<sup>1</sup>Both year and age missing

From the same table, the percentage of surviving children in the last 15 years with known month and year of birth is 100 percent in 1995-97, compared with 92 percent or less in the preceding. For dead children, the percentages are 100 and 72 percent, respectively. Sex ratios vary year by year without any indication of bias. However, women seem to have better recall of dead male children than dead female children, as indicated by the much higher sex ratios for dead children. Observing the calendar ratios, there seems to be a deficit of birth in 1991, and a surplus in 1990 (Figure C.1). For all births, the ratio of births in 1991 to the average of the two adjoining years is 0.86, and for births in 1990 it is 1.17. The phenomenon is more serious among dead children where the deficit also occurs for births in 1992. These numbers may represent a deliberate attempt by some interviewers to reduce their work loads, in particular to shorten the interview by skipping the health sections which ask extensive questions about children under five.

Table C.5 shows that the proportion of early neonatal deaths among all neonatal deaths is consistent with declining infant mortality rates. The same conclusion can be drawn from higher proportion of neonatal deaths among all deaths (Table C.6). Table C.6 shows that there is a heaping in age at death in multiple of 6 months.



Table C.4 Births by calendar years

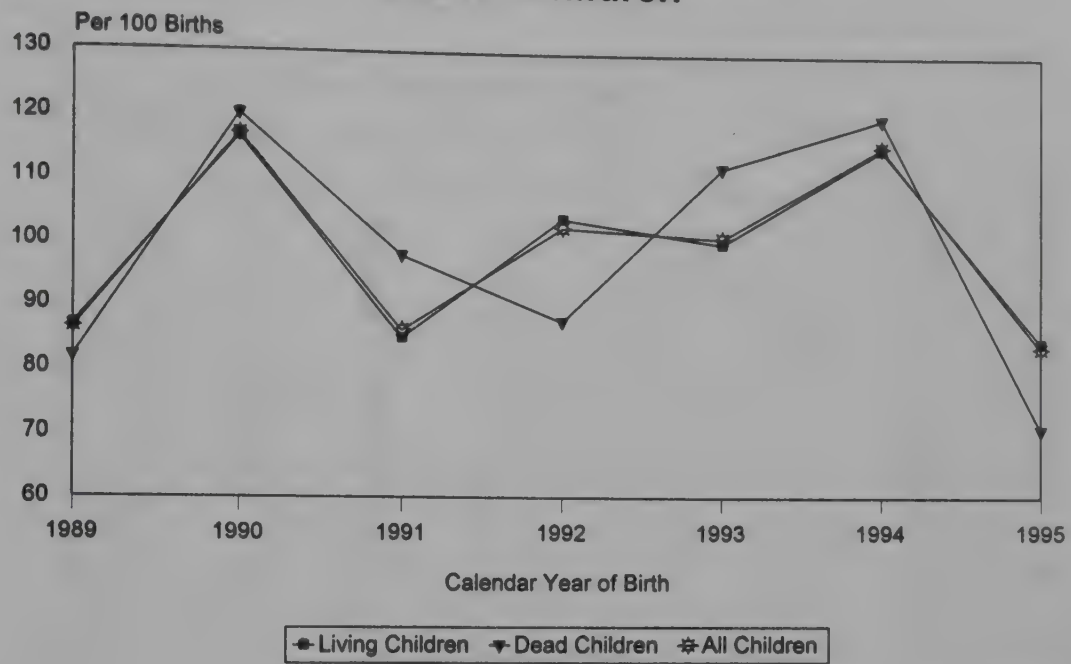
Distribution of births by calendar years for living (L), dead (D), and all (T) children, according to reporting completeness, sex ratio at birth, and ratio of births by calendar year, Indonesia 1997

Year	Number of births			Percentage with complete birth date <sup>1</sup>			Sex ratio at birth <sup>2</sup>			Calendar ratio <sup>3</sup>			Male			Female		
	L	D	T	L	D	T	L	D	T	L	D	T	L	D	T	L	D	T
97	3,046	178	3,225	99.9	99.8	99.9	112.7	146.2	114.3	-	-	-	1,614	106	1,720	1,432	72.0	1,505
96	3,034	163	3,196	100.0	100.0	100.0	105.2	139.7	106.8	104.4	97.5	104.0	1,556	95	1,650	1,478	68.0	1,546
95	2,765	156	2,921	100.0	100.0	100.0	106.4	126.7	107.4	84.7	70.7	83.8	1,426	87	1,513	1,340	69.0	1,408
94	3,498	278	3,776	92.3	71.7	90.8	111.1	150.9	113.6	115.2	120.6	115.6	1,841	167	2,009	1,657	111.0	1,768
93	3,307	306	3,612	91.7	65.7	89.5	108.3	124.2	109.5	100.0	112.7	101.0	1,719	169	1,888	1,588	136.0	1,724
92	3,113	264	3,377	89.4	62.7	87.3	103.7	114.9	104.5	103.9	86.5	102.3	1,585	141	1,726	1,528	123.0	1,651
91	2,684	305	2,989	89.0	58.2	85.9	105.8	136.7	108.6	85.1	98.5	86.3	1,380	176	1,556	1,304	129.0	1,433
90	3,196	355	3,551	89.1	60.5	86.3	99.8	125.1	102.1	116.7	120.3	117.1	1,597	197	1,794	1,599	158.0	1,757
89	2,792	285	3,077	86.3	58.0	83.7	97.6	120.3	99.5	86.6	81.6	86.1	1,379	156	1,535	1,413	129.0	1,542
88	3,248	344	3,592	87.5	61.9	85.0	100.9	96.0	100.4	NA	NA	NA	1,631	168	1,800	1,617	175.0	1,792
1993-97	15,650	1,081	16,731	96.5	83.0	95.6	108.8	136.9	110.4	NA	NA	NA	8,155	624	8,780	7,495	456.0	7,951
1988-92	15,033	1,552	16,585	88.3	60.3	85.7	101.5	117.4	102.9	NA	NA	NA	7,572	838	8,410	7,461	714.0	8,175
1983-87	14,848	1,866	16,714	86.4	57.0	83.1	105.0	136.2	108.0	NA	NA	NA	7,603	1,076	8,679	7,244	790.0	8,035
1978-82	10,546	1,704	12,249	79.7	52.1	75.9	104.0	120.4	106.1	NA	NA	NA	5,376	931	6,306	5,170	773.0	5,943
< 1978	7,619	1,975	9,594	72.7	46.5	67.3	106.9	142.7	113.4	NA	NA	NA	3,936	1,161	5,097	3,683	814.0	4,497
All	63,695	8,178	71,873	86.6	57.5	83.3	105.1	130.5	107.7	NA	NA	NA	32,642	4,631	37,272	31,053	3,547.0	34,601

NA = Not applicable

<sup>1</sup>Both year and month of birth given<sup>2</sup> $(B_m/B_f) \times 100$ , where  $B_m$  and  $B_f$  are the numbers of male and female births, respectively<sup>3</sup> $[2B_x/(B_{x-1} + B_{x+1})] \times 100$ , where  $B_x$  is the number of births in calendar year  $x$

**Figure C.1**  
**Calendar Birth Ratios for Living, Dead,**  
**and All Children**



IDHS97

Table C.5 Reporting of age at death in days

Distribution of reported deaths under one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods preceding the survey (weighted), Indonesia 1997

Age at death (in days)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1	102	113	93	93	400
1	84	105	83	74	346
2	22	32	25	47	126
3	17	17	35	27	95
4	6	14	9	8	37
5	15	18	18	37	88
6	4	12	21	37	74
7	41	59	95	86	281
8	4	11	8	9	33
9	7	4	17	14	42
10	8	13	19	5	46
11	0	0	5	2	7
12	1	8	5	2	17
13	0	1	4	5	10
14	11	11	13	7	42
15	2	17	12	32	64
16	4	0	1	1	7
17	5	4	1	5	15
18	1	4	2	1	8
19	1	1	1	3	5
20	7	4	6	5	21
21	1	7	3	3	14
22	1	1	0	0	3
23	0	0	0	0	0
24	1	1	0	1	2
25	2	2	3	1	18
26	0	0	2	1	3
27	1	0	0	0	1
28	0	8	1	2	12
29	2	1	0	0	3
30	0	1	4	1	7
Total 0-30	350	470	487	522	1,828
Percent early neonatal <sup>1</sup>	71.3	66.2	58.1	62.1	63.8

<sup>1</sup>(0-6 days/0-30 days) × 100



Table C.6 Reporting of age at death in months

Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at ages under one month, for five-year periods preceding the survey (weighted), Indonesia 1997

Age at death (in months)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1 <sup>a</sup>	350	470	487	522	1,828
1	86	79	110	127	402
2	53	79	92	73	298
3	41	59	84	84	269
4	30	37	43	48	159
5	20	38	39	23	121
6	34	35	64	46	179
7	16	34	63	46	159
8	18	42	58	49	168
9	25	24	31	28	108
10	18	21	31	26	95
11	10	19	9	23	62
12	22	94	94	131	341
13	3	7	23	19	53
14	5	7	6	17	35
15	2	4	9	18	34
16	3	8	2	8	21
17	2	5	6	2	15
18	2	18	17	22	59
19	0	2	3	0	5
20	1	4	8	1	14
21	1	0	4	4	9
22	0	0	1	0	1
23	0	6	1	6	13
Total 0-11	702	937	1,113	1,096	3,848
Percent neonatal <sup>b</sup>	49.8	50.1	43.7	47.7	47.5

<sup>a</sup>Includes deaths under 1 month reported in days

<sup>b</sup>(Under 1 month/under 1 year) × 100



## **APPENDIX D**

### **PERSONS INVOLVED IN THE 1997 INDONESIA DEMOGRAPHIC AND HEALTH SURVEY**





## APPENDIX D

### PERSONS INVOLVED IN THE 1997 INDONESIA DEMOGRAPHIC AND HEALTH SURVEY

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Dr. Si Gde Made Mamas	CBS
dr. R.Hasan M. Hoesni, MPH	NFPCB
Drs. A. Muchyi, MM	NFPCB
Drs. Mazwar Noerdin	NFPCB
Dr. Soeharsono Soemantri	MOH
Drs. Tohir Diman, MA	MOP
dr. Ratna L. Budiarso, MSPH	MOH
Dr. Sri Harijati Hatmadji	DIUI
Dr. Sri Moertiningsih Adioetomo	DIUI
dr. Siswanto Agus Wilopo, PhD	MOP
Drs. Zulkifli Gozali	NFPCB
Drs. Made Are Subrata	NFPCB
Ir. Maesuroh, MS	CBS
Drs. Suharno, MSc	CBS
R. Lukito Praptoprijoko, MA	CBS
Dra. Kasmiyati, MSc	NFPCB
Dr. Ida Bagus Permana	NFPCB
S. Happy Hardjo, SE, MEc	CBS
Drs. Eri Hastoto	CBS
Ir. Wien Kusdiatmono	CBS
Togi Siahaan, DPSc	CBS
Ir. Thoman Pardosi, SE	CBS
Drs. Asaad Malik, MA	NFPCB
Dra. Suwartiningsih	NFPCB
Ir. Siti Fathonah, MPH	NFPCB
Sri Wahyuni, SH, MA	NFPCB
Herawati Suci W.	CBS
Ir. Endah Winarni, MSPH	NFPCB
Rahmadewi, MKM	NFPCB
Syahmida S. Arsyad, MS	NFPCB

## DHS STAFF

Sri Poedjastoeti	Pav Govindasamy
Anne Cross	Sidney Moore
Martin Wulfe	Celia Khan



## **INSTRUCTORS (CBS)**

Ir. Maesuroh, MS	Ir. Djoko Yuwono
Drs. Suharno, Msc	Ir. S. Gultom
R. Lukito Praptoprijoko, MA	Ir. Diah Utami
Ir. Wien Kusdiatmono	Nuraini
Ir. Thoman Pardosi	Tri Sudiati, MA
Togi Siahaan, DPSc	Indra Susilo, DPSc
Ir. Sri Santo Budi M., MA	Awaludin Apriyanto, DPSc
M. Taufiq, DPSc	Ir. Didiek Santoso
Tri Windiarto	Teodora H. Siahaan
Agus Prasetio, DPSc	Drs. Syafi'i Nur

## **DATA PROCESSING STAFF (CBS)**

Syafi'i Nur	Dendi Hadiatmo
Nurma Widayanti	Aan Sudjanah
Didiek Santoso	Tri Windiarto

## **SURVEY FIELD STAFF BY PROVINCE**

### **Dista Aceh**

Kepala KS Propinsi Field Coordinator	Moch. Machin Ervan Hera Hendra Permana
Supervisors	Marine Suhadi Angkat Kastabuan Daud Muh. Saichudin
Field Editors	Sudarni Umami Salamah Rahmi Veronica
Interviewers	Israwati Zahniar Sakdiah Rosni Cut Rosmita Zuriah Sokdani Mardhiah Umar Lella Kurniawati Deti Supartini Liana Muslimah

### **North Sumatra**

Kepala KS Propinsi Field Coordinator	Saudin H. Sitorus Abdul Manaf
Supervisors	Poltak Manurung M. Yahya Lubis Edy War Syarifin
Field Editors	Rika Ventina Diana Aulia Adnan Nurmauli L Gaol Tuti Hidayati
Interviewers	Timorlan Simamora Herdiana Tambunan Nursiti Situmeang Cut Mahani Muslihatun Suriana Musnah Azis Sri Andriani Rabiah Wahyu Andamari Tantri Herawati Elfrida Nuraini Khairani

**West Sumatra**

Chief, Statistics Office Field Coordinator	Armuni Umar Bambang Yuniadi
Supervisors	Nilham Gusnaidi Agusman Surya
Field Editors	Devi Deswati Reniwati Yuni Marlita
Interviewers	Rahayu Arieswati Okder Insantri Darni Welda Roza Harlinda Yanti Endaryani Huseifa Nurhayati Sri Okta Susilawati

**Riau**

Chief, Statistics Office Field Coordinator	Soetedjo Martohandojo Azwar Thalib
Supervisors	Anwar Pane Yusuf Isnandar H. Mohd. Lubis
Field Editors	Dewi Kristiani Vera Renianti Nst Elly Yuliasuti
Interviewers	Ermiaati Noviana Endang Hariani Nurhayati Murni Yustini Diah Heriani Hasyunita Nst Hasmalina Nst Dewi Khadijah

**Jambi**

Chief, Statistics Office Field Coordinator	H.M. Nasir Syarbaini Bambang Luarso
Supervisors	Ismail Amshal Yaya Setiadi A. Fauzi
Field Editors	Dewi Handayani Retno Indrawati Siti Nurhayati
Interviewers	Eleon Madjid Saniah Yuniar Nurnizawati Asnidar Gaib Emi Lestari Juriati Rosman Rustam Hartini Descik

**South Sumatra**

Chief, Statistics Office Field Coordinator	Ardief Achmad M. Sairi
Supervisors	A. Rahman YS Sailendra Nawawi Nazarudin Latief
Field Editors	Zubaidah Adriana Adeyanti P Rohana
Interviewers	Suparindyah Rosilawaty Netty Simanjuntak Ningsih Niswati Risnahayati Harjanti Yeni Dwi Sartika Herlina  Yeni Dwi Sartika Sevtie Marthalena

**Bengkulu**

Chief, Statistics Office  
Field Coordinator

Th. Soeprono  
Hamdani Siswojo

Supervisors

Yuniarto  
Yulian Effendi  
Hariadi

Field Editors

Dewi Handayani  
Chamsiah H.  
Nurwilis

Interviewers

Eka Prihartini  
Betty Viozeta  
Sri Indiyah Winarti  
Sumarah Muji Lestari  
Eli Efrida  
Amalela Netty  
Yenda Sufriani  
Elya Sumarni  
Hayaul Ilmi

**Lampung**

Chief, Statistics Office  
Field Coordinator

H. Soeparno  
M. Haslani Haris

Supervisors

Paulus S  
Wildan M.  
Edy Kurniawan

Field Editors

S Nani Kartini  
Dartinia Arifin  
Nella Wesa Putri

Interviewers

Elvisari  
Ana Suharnani  
Hayati  
Elvisari  
Supraptiati  
Darsinella  
Farida Iryani  
Tri Evi Apriani  
Elis Ainihasan  
Luluk Tanjung W  
Wagiyem

**DKI Jakarta**

Chief, Statistics Office  
Field Coordinator

Abdul Kadir Hasibuan  
Rusman Desiar

Supervisors

Nur Pudyanto  
Patrianto  
Chaerul Anwar

Field Editors

Atik Fitriki  
Siti Zahrowati  
Gandari Adianti A.F

Interviewers

Titi Rubaah  
Zaitun Zainuddin  
Ratna Purba  
Sri Purwaningsih  
Sri Hastuti  
Luky Windarti  
Siti Alifah  
Eriyani M.D  
Siti Maryani  
Tri Lestari

**West Java**

Chief, Statistics Office  
Field Coordinator

Moch. Asta  
Lukman Ismail

Supervisors

Agus praptomo  
Adang Suteja  
Berdikarjaya

Field Editors

Warso Suryana  
Sumaryati  
Sugati

Interviewers

Surasti  
Endang Suhaeni  
Sinta  
Amarin Lestari  
Tati fatimah  
Nani Komala Sari  
Tutut Sudaryati  
Nani Hendaryani  
Ening Trisnawati  
Ratna S  
Woro  
Tati Ratnawati  
Partinah  
Tri Isdinamiati  
Rina Rosidawati



**Central Java**

Chief, Statistics Office  
Field Coordinator

Samadi  
Wagiyo

Supervisors

Eddy Susilo  
Fahrudin TUB  
Abdul Jamil  
Sajoga

Field Editors

Ratna Setyowaty  
Rahayu HN  
SD Daryuni

Interviewers

Retno Widowati  
Sudarti  
Aning Widiatmi  
Mulyati  
Farida  
Gani Sri Anawati  
Ardina Kurniati  
Rahayu Ambarwati  
Riri Supriyati  
Budi Supriyati  
Supriyati  
Titis Yanti SN  
Nuralin  
S. Wardiningsih

**DI Yogyakarta**

Chief, Statistics Office  
Field Coordinator

Subagio DW  
Syarifah

Supervisors

Tohirman  
Surachman  
Sudarmo

Field Editors

Susiarti  
Mimy Sumardi  
Sri Budi R.

Interviewers

Chrisdiana W.  
W.L. Sumartini  
Nanik Rumilah  
Triatmi  
T.H. Aviantri  
Nurul Huda  
Rinarti  
Iswanti  
D.A. Widayanti  
T.H. Kristiani

**East Java**

Chief, Statistics Office  
Field Coordinator

Suwondo Hp.  
Ida Komang Wisnu

Supervisors

Suparno  
Purbantoro  
Heri Sunanto  
Isman

Field Editors

Endang S  
Endang Sulastri  
Agustina Martha  
Dwi Imawati

Interviewers

Rusmeiyati  
Dyah Retnani  
Dwi Handayani  
Siti Maria Ulfah  
Rosa  
Rusmaladewi  
Iva Rinjani  
Triana  
Budiyati dewi A  
Endang M  
Irina  
Zaidatul M  
Anik Hidayati

**Bali**

Chief, Statistics Office  
Field Coordinator

Ahmad Budiono  
Ibram Syachbudin

Supervisors

I. Wayan Panta  
A. Ngurah Wijaya  
IGM. Purnajiwa  
Ida Ayu Komang W.  
Ni.Gst.Ayu. Ngh. Suryati  
Ni Made Wartini  
Ni Putu Minarni  
Ni Nyoman Yuniari  
Ni Made Budriani  
Ni Nengah Riandani  
Dewa Ayu Kadek Satrini  
A.A. Sagung Mas Rani  
Ni Nyoman Rusni  
Ni Nyoman Surati  
Ni Nyoman Sulendrawati  
Ni Wayan Naba  
Ni Wayan Sukartiningsih

**West Nusa Tenggara**

Chief, Statistics Office  
Field Coordinator

Moch. Kasim  
Zaini Affin

Supervisors

Lalu Tohran  
Tri Haryanto  
Zainal Arifin

Field Editors

Patimasang  
Nurlailah  
Ida Ayu MD Suthendri

Interviewers

Erniwati SP  
Nur Widyawati  
Ida Ayu Widyalakmi  
Nur Wydyawati  
Sri Yudiati  
FifiLuthfida  
Rabiah  
Sri Banun  
Sri Handayani  
Nuraida  
Miskiah  
Sri Wulandari

**East Nusa Tenggara**

Chief, Statistics Office  
Field Coordinator

H.O. Simanjuntak  
J. Aliandu

Supervisors

Moch. Batik  
Johanes Bauk  
Yack Ganggar

Field Editors

M. I. Goetha  
Martina P.A. Riwu Dake  
Adwi Hastuti

Interviewers

Sunarmi  
Agusthina Ouwpoly  
Doris S. Palla  
Jenny J. Seran  
Yohana Yaku Babang  
Y. Teorilde Toa  
M.I. Skera  
Dina. H. Foeh  
Norfiana R. Bianone  
Hemy Ratmas Djasibani

**West Kalimantan**

Chief, Statistics Office  
Field Coordinator

Prijono  
Willy Hendria

Supervisors

Sukwantono  
Hasyuan  
Basuni Abdullah

Field Editors

Tri Setiani  
Samiati  
Ade Yuspita

Interviewers

Suratini  
Dwi Asriatun  
Sri Mulyani  
Mardiana  
Juhariah  
Ida Royani S  
Emi Kurniasari  
Triana Idrawati  
Sari Sasrika  
Jamaliah  
Rosihan Anwar

**East Timor**

Chief, Statistics Office  
Field Coordinator

Sunardi, AS  
Kelengi Meliala

Supervisors

M. Suaib T.D  
Diogo Neto Fraga  
Antonio Soares

Field Editors

Rr. Sri Handayani  
Rambu Anamila  
Levina E.S.

Interviewers

Juiana S. Mauleti  
Lily Pulung  
Isabel G. Barreto  
Eva Fernandes  
Maria F. Ili  
Domingas R.De.A.Da.C.X  
Henriqueta Da Costa Braz  
Paulina R.C. Viegas  
Carminda Dos Santos Pareira

**South Kalimantan**

Chief, Statistics Office Field Coordinator	Ny. U. Sri Ridati Ishak Akhmad
Supervisors	Agnes Widiastuti Ipansyah Kamaruddin SY
Field Editors	Sukasih Misnawati STM. Ernawati
Interviewers	Sri Fawartini Rusmiati Kumalawati Kartini Satia Noor Sri Wahyuni Muhdiati Sri Harmini Norhasanah Norhayani Sri Muriani

**Central Kalimantan**

Chief, Statistics Office Field Coordinator	Purwotanoyo Djarieh Soelaiman
Supervisors	Waras Barland I Tanda Bakhzar Efendi
Field Editors	Aspina Yohana Sari rahayu
Interviewers	Erma Natalia Tumini Sitti Aisyah Berlian Yulintine Siti Asmah Siti Norhasanah Herlina Pandang Sri Murtiningsih Rahayu

**East Kalimantan**

Chief, Statistics Office Field Coordinator	Sunari Sarwono Hartono Soerono
Supervisors	Ahmad Yani Subagio Ismail Basiran Suwandi
Field Editors	Rosdaniar Rapinah Siti Fariansyah Yana
Interviewers	Mursinah Ida Zairita Solihat Muyani Dahlani Aloha Lilis Suryani Vivi Azwar Rini Sulistyowati Sri Maisari

**North Sulawesi**

Chief, Statistics Office Field Coordinator	Thaib M. Datau Djumed Cholid
Supervisors	Bernard Iqir Lempo Tambeo Marthedy Tenggehi
Field Editors	Ruida Liputo A. Katuuk Augustin Pusung
Interviewers	Johanna Tampemawa Sevelin Paseki Santje M. Prang Lusiana Tungkagi Juliana Kalumata Aisa Datau Silvana Datau Silfia Pelealu Ningsih Ismail Emmy Rau Ratna Dengo



**South Sulawesi**

Chief, Statistics Office  
Field Coordinator

Mahmudi  
Razali Ritonga

Supervisors

M. Rismat R  
Tulus Subagyo  
Mansyur Majang  
Titus Rukka  
Nurmiati

Field Editors

Interviewers

Fatmawati  
Maria Wara  
Insana  
Erliana Azis  
Rosmiati  
Sri Iriantiningasih  
Saharibanong  
Ajirah  
Pashainu  
Asnidar  
Suryati Setaram  
Andi Asmarani  
Murniati Amir  
H. Sunarti  
H. Halijah  
Waedo Astuti

**Central Sulawesi**

Chief, Statistics Office  
Field Coordinato

Kaharso  
Kamdin Kiamas

Supervisors

Oce Janggola  
Henri Simanjentak  
I Nyoman Dwindu  
Selvy Tokare  
Yohana Ambatoding

Field Editors

Interviewers

Rahmi Gayanda  
Sri Iriani H.  
Olivia Tombeng  
Yuniar Tololo  
Sartin Djauhari  
Urismawati  
Ramlah Tangahu  
Wahida  
Magna Sadiki  
Gamar Butudoka

**Southeast Sulawesi**

Chief, Statistics Office  
Field Coordinator

Soehandono  
Teguh Pramono

Supervisors

Sunadi  
Ambar Dwi Santoso

Field Editors

Abd Rahman M.  
Sriwiyanti  
Sumarni L.  
Nunung Dwi Syahesti  
Titik Nurbaiti  
Tri Purwaningrum  
Salipah  
Saribulan  
Siti Maswiyah  
Suryanti T.  
WD. Sri Marjanawati  
Sultriawaty Effendi  
Ida D.

Interviewers

**Maluku**

Chief, Statistics Office  
Field Coordinator

E. Seimahuira  
Stevanus Nanlohy

Supervisors

P. Bwardalam  
R. Lopulalan

Field Editors

Djohar Layn  
A. Sahetapy  
P.A. Salawane  
N. Togububu  
M. Salim  
Ch. H. Persulesy  
H. Holle  
J. Oppier  
J. Pattipeilohy  
J. Leatemala  
S. de Lima  
W. Gaspersz  
M. Sahalessy

Interviewers

## **Irian Jaya**

Chief, Statistics Office  
Field Coordinator

Mansyur Siradz  
Soaloon Siahaan

Supervisors

Pudjiono  
Arifuddin Syarkardi  
Kahar Abd. Gani

Field Editors

Adriana H Carolina  
Eko Mardiana  
Nurhaida Sirun

Interviewers

Marie Ellen Tahitu  
Albertina Monim  
Niken A. Anggraini  
Rosa Pigai  
Martha Saiya  
Brendina Patongloan  
Endang Budi Rahayu  
Martha Nasatekai  
Marlyn Risamasu

**APPENDIX E**

**QUESTIONNAIRES**





# INDONESIA DEMOGRAPHIC AND HEALTH SURVEY 1997

## HOUSEHOLD SCHEDULE

Confidential

IDENTIFICATION		CODE	
1. PROVINCE .....			
2. REGENCY/MUNICIPALITY *).....			
3. SUB-DISTRICT .....			
4. VILLAGE .....			
5. AREA.....URBAN - 1.....RURAL - 2 **)			
6. LARGE CITY -1/SMALL CITY -2/TOWN -3/COUNTRYSIDE -4*)			
7. ENUMERATION AREA NUMBER .....			
8. IDHS 1997 SAMPLE CODE.....			
9. HOUSEHOLD NUMBER.....			
10. NAME OF HOUSEHOLD HEAD .....			

INTERVIEWER VISITS				
	1	2	3	FINAL VISIT
INTERVIEW DATE.....				DATE
INTERVIEWER'S NAME....				MONTH
RESULT ***) .....				YEAR
NEXT VISIT: DATE				1 9 9 7
TIME				INTERVIEWER
				FINAL RESULT
				TOTAL NO. OF VISIT
***) RESULT CODES: 1 COMPLETED 2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT 3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD 4 POSTPONED 5 REFUSED 6 DWELLING VACANT OR ADDRESS NOT A DWELLING 7 DWELLING DESTROYED 8 DWELLING NOT FOUND 9 OTHER _____ (SPECIFY)				NO. OF HOUSEHOLD MEMBERS TOTAL EVER-MARRIED WOMEN 15-49 NUMBER OF FAMILY RESPONDENT LINE NUMBER

	FIELD EDITOR	SUPERVISOR	OFFICE EDITOR	CODE	KEYED BY	CODE
NAME						
DATE						

\*) Cross out category not used  
 \*\*) Circle selected category  
 \*\*\*) Choose suitable result

# HOUSEHOLD

Now I would like some information about

NO.	USUAL RESIDENTS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	AGE	FAMILY		EDUCATION					
					FAMILY NUMBER	STATUS IN FAM.	FOR ALL PERSONS AGED 5 OR OLDER					
							WRITE FAMILY NUMBER	CODE FATHER-1 MOTHER-2 CHILD -3	Has (NAME) ever been to school? IF CODE 2 SKIP TO COL. (11)	What is the highest level of school (NAME) attended? What is the highest grade (NAME) completed at that level**	IF AGE LESS THAN 25 YEARS Is (NAME) still in school?	Can (NAME) read?
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		
			M F	YEARS			YES NO	LEVEL GRADE	YES NO	YES NO		
01			1 2				1 2		1 2	1 2		
02			1 2				1 2		1 2	1 2		
03			1 2				1 2		1 2	1 2		
04			1 2				1 2		1 2	1 2		
05			1 2				1 2		1 2	1 2		
06			1 2				1 2		1 2	1 2		
07			1 2				1 2		1 2	1 2		
08			1 2				1 2		1 2	1 2		
09			1 2				1 2		1 2	1 2		
10			1 2				1 2		1 2	1 2		
11			1 2				1 2		1 2	1 2		
12			1 2				1 2		1 2	1 2		
13			1 2				1 2		1 2	1 2		
14			1 2				1 2		1 2	1 2		
15			1 2				1 2		1 2	1 2		
16			1 2				1 2		1 2	1 2		
17			1 2				1 2		1 2	1 2		

TICK HERE IF CONTINUATION SHEET USED ☐

NUMBER OF FAMILY ☐

Just to make sure that I have a complete listing:

- Are there any other persons such as small children or infants that we have not listed?
- Are there any other people who may not be members of your family, like servants, friends, lodgers, but who usually live here?
- Are there any other guests or visitors who have been temporarily staying with you for the past 6 months or more?
- Are there any persons who usually live here who have been away for less than 6 months?
- Are there any persons we have listed who have been away for the past six months?

\*) CODES FOR COLUMN (3)

RELATIONSHIP TO HEAD OF HOUSEHOLD:

01= HEAD

02= WIFE OR HUSBAND

03= SON OR DAUGHTER

04= SON OR DAUGHTER-IN-LAW

05= GRANDCHILD

06= PARENT

07= PARENT-IN-LAW

08= BROTHER OR SISTER

09= OTHER RELATIVE

10= ADOPTED/FOSTER CHILD

11= STEPCHILD

12= NOT RELATED

98= DON'T KNOW



# SCHEDULE

the people who usually live in your household.

PARENTAL SURVIVORSHIP AND RESIDENCE FOR PERSONS LESS THAN 15 YEARS OLD				MARITAL STATUS		ELIGIBILITY									
Is (NAME)'s natural mother alive?			IF ALIVE Does (NAME)'s natural mother live in this household?  IF YES: What is her name?  RECORD MOTHER'S LINE NUMBER (13)			Is (NAME)'s natural father alive?			IF ALIVE Does (NAME)'s natural father live in this household?  IF YES: What is his name?  RECORD FATHER'S LINE NUMBER (15)			FOR WOMEN AGE 10 YEARS AND ABOVE  Has (NAME) ever been married?		CIRCLE LINE NUMBER OF ALL EVER-MARRIED WOMEN AGE 15-49 FOR INDIVIDUAL INTERVIEW	
(12)			(13)			(14)			(15)			(16)		(17)	
YES	NO	DK				YES	NO	DK				YES	NO		
1	2	8				1	2	8				1	2	01	
1	2	8				1	2	8				1	2	02	
1	2	8				1	2	8				1	2	03	
1	2	8				1	2	8				1	2	04	
1	2	8				1	2	8				1	2	05	
1	2	8				1	2	8				1	2	06	
1	2	8				1	2	8				1	2	07	
1	2	8				1	2	8				1	2	08	
1	2	8				1	2	8				1	2	09	
1	2	8				1	2	8				1	2	10	
1	2	8				1	2	8				1	2	11	
1	2	8				1	2	8				1	2	12	
1	2	8				1	2	8				1	2	13	
1	2	8				1	2	8				1	2	12	
1	2	8				1	2	8				1	2	13	
1	2	8				1	2	8				1	2	14	
1	2	8				1	2	8				1	2	15	

TOTAL NUMBER OF ELIGIBLE WOMEN

YES ☐ → ENTER EACH IN TABLE

YES ☐ → ENTER EACH IN TABLE

YES ☐ → ENTER EACH IN TABLE

YES ☐ → ENTER EACH IN TABLE

YES ☐ → DELETE NAMES FROM TABLE

NO ☐

NO ☐

NO ☐

NO ☐

NO ☐

\*\*) CODES FOR COLUMN (7)  
LEVEL OF EDUCATION:  
1= PRIMARY SCHOOL  
2= JUNIOR HIGH SCHOOL  
3= SENIOR HIGH SCHOOL  
4= ACADEMY

5= UNIVERSITY  
8= DON'T KNOW

GRADE:  
7=COMPLETED  
8=DON'T KNOW

NO.	PERTANYAAN DAN SARINGAN	KODE	TERUS KE																								
01	What is the main source of drinking water for members of your household?	PIPED INTO RESIDENCE.....11 PIPED INTO YARD OR PLOT.....12 PUBLIC TAP.....13 PUMP.....21 PROTECTED WELL.....22 UNPROTECTED WELL.....23 PROTECTED SPRING.....31 UNPROTECTED SPRING.....32 RIVER.....33 RAINWATER.....41 OTHER.....96 (SPECIFY)	13																								
02	How long does it take to go there, get water and come back?	MINUTES..... ON PREMISES.....996																									
03	What kind of toilet facility does your household have?	PRIVATE WITH SEPTIC TANK.....11 PRIVATE WITH NO SEPTIC TANK.....12 SHARED/PUBLIC.....21 RIVER.....31 OTHER.....96 (SPECIFY)																									
04	CHECK 15  WELL (CODES 21,22,23) <input type="checkbox"/> V	OTHER CODES <input type="checkbox"/>	06																								
05	How far is the distance between the well and the nearest cesspool? (IN METER)	DISTANCE..... METERS DON'T KNOW.....98																									
06	Does your household have:	<table border="1"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>Electricity?</td> <td>1</td> <td>2</td> </tr> <tr> <td>A radio or tape recorder?</td> <td>1</td> <td>2</td> </tr> <tr> <td>A television?</td> <td>1</td> <td>2</td> </tr> <tr> <td>A gas stove?</td> <td>1</td> <td>2</td> </tr> <tr> <td>A kerosene stove?</td> <td>1</td> <td>2</td> </tr> <tr> <td>An electric stove?</td> <td>1</td> <td>2</td> </tr> <tr> <td>A refrigerator?</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	Electricity?	1	2	A radio or tape recorder?	1	2	A television?	1	2	A gas stove?	1	2	A kerosene stove?	1	2	An electric stove?	1	2	A refrigerator?	1	2	
	YES	NO																									
Electricity?	1	2																									
A radio or tape recorder?	1	2																									
A television?	1	2																									
A gas stove?	1	2																									
A kerosene stove?	1	2																									
An electric stove?	1	2																									
A refrigerator?	1	2																									
07	Does any member of your household own:	<table border="1"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>A bicycle/rowboat?</td> <td>1</td> <td>2</td> </tr> <tr> <td>A motorcycle/motorboat?</td> <td>1</td> <td>2</td> </tr> <tr> <td>A car?</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	A bicycle/rowboat?	1	2	A motorcycle/motorboat?	1	2	A car?	1	2													
	YES	NO																									
A bicycle/rowboat?	1	2																									
A motorcycle/motorboat?	1	2																									
A car?	1	2																									
08	MAIN MATERIAL OF THE FLOOR  (RECORD OBSERVATION)	DIRT/EARTH.....11 BAMBOO.....21 WOOD.....22 CONCRETE/BRICK.....31 TILE.....32 CERAMIC/MARBLE/GRANITE.....33 OTHER.....96 (SPECIFY)																									
09	What is the floor area of your building? (IN SQUARE METERS)	AREA..... M2 DON'T KNOW.....998																									
10	What is the primary construction material of the outer wall?	BRICK.....1 WOOD.....2 BAMBOO.....3 OTHER.....6 (SPECIFY)																									
11	What is the primary construction material of the roof?	CONCRETE.....01 WOOD.....02 TILE.....03 ASBESTOS/ZINC.....04 LEAVES.....05 OTHER.....96 (SPECIFY)																									
12	What is the ownership status of your building?	OWN.....01 MORTGAGE.....02 CONTRACT.....03 RENT.....04 OFFICIAL.....05 OTHER.....96 (SPECIFY)																									

# INDONESIA DEMOGRAPHIC AND HEALTH SURVEY 1997

## INDIVIDUAL QUESTIONNAIRE

Confidential

IDENTIFICATION		CODE	
1. PROVINCE .....			
2. REGENCY/MUNICIPALITY *) .....			
3. SUB-DISTRICT .....			
4. VILLAGE .....			
5. AREA.....URBAN - 1.....RURAL - 2 **)			
6. LARGE CITY -1/SMALL CITY -2/TOWN -3/COUNTRYSIDE -4*)			
7. ENUMERATION AREA NUMBER .....			
8. IDHS 1997 SAMPLE CODE.....			
9. HOUSEHOLD NUMBER.....			
10. NAME OF HOUSEHOLD HEAD .....			
11. LINE NUMBER OF WOMAN FROM HOUSEHOLD SCHEDULE.....			
12. NAME OF WOMAN .....			

INTERVIEWER VISITS				
	1	2	3	FINAL VISIT
INTERVIEW DATE.....				DATE
INTERVIEWER'S NAME....				MONTH
RESULT ***) .....				YEAR
				INTERVIEWER
NEXT VISIT: DATE				FINAL RESULT
TIME				TOTAL NO. OF VISIT

\*\*\*) RESULT CODES:

1 COMPLETED	4 REFUSED	7 OTHER _____
2 NOT AT HOME	5 PARTLY COMPLETED	(SPECIFY)
3 POSTPONED	6 INCAPACITATED	

	FIELD EDITOR	SUPERVISOR	OFFICE EDITOR	CODE	KEYED BY	CODE
NAME						
DATE						

- \*) Cross out category not used  
 \*\*) Circle selected category  
 \*\*\*) Choose suitable result



SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
101	RECORD THE TIME.	HOUR..... MINUTES.....	
102	First I would like to ask some questions about you. For most of the time until you were 12 years old, did you live in a city, in a town, or in a village?	CITY... ..1 TOWN... ..2 VILLAGE... ..3	
105	In what month and year were you born?  WRITE MONTH IF NOT IN WESTERN CALENDAR  MONTH: _____	MONTH..... DON'T KNOW MONTH... ..98 YEAR..... DON'T KNOW YEAR... ..9998	
106	How old were you at your last birthday?  COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS.....	
106A	Are you now married, divorced or widowed?	MARRIED... ..1 DIVORCED... ..2 WIDOWED... ..3	
107	Have you ever attended school?	YES... ..1 NO... ..2	114
108	What is the highest level of school you attended: primary, junior high, senior high, academy, or university?	PRIMARY... ..1 JUNIOR HIGH SCHOOL... ..2 SENIOR HIGH SCHOOL... ..3 ACADEMY... ..4 UNIVERSITY... ..5	
109	What is the highest (GRADE, FORM, YEAR) you completed at that level?  COMPLETED = 7	GRADE.....	
110	CHECK 106:  AGE LESS THAN 25 <input type="checkbox"/> AGE 25 OR ABOVE <input type="checkbox"/>		113
111	Are you currently attending school?	YES... ..1 NO... ..2	113
112	What was the main reason you stopped attending school?	GOT PREGNANT... ..01 GOT MARRIED... ..02 TO CARE FOR CHILDREN... ..03 FAMILY NEEDED HELP ON FARM OR IN BUSINESS... ..04 COULD NOT PAY SCHOOL FEES... ..05 NEEDED TO EARN MONEY... ..06 GRADUATED/HAD ENOUGH SCHOOLING... ..07 DID NOT PASS EXAMS... ..08 DID NOT LIKE SCHOOL... ..09 SCHOOL NOT ACCESSIBLE/TOO FAR... ..10 OTHER... ..96 (SPECIFY) DK... ..98	
113	CHECK 108:  PRIMARY <input type="checkbox"/> JUNIOR HIGH OR HIGHER <input type="checkbox"/>		115
114	Can you read and understand a letter or newspaper easily, with difficulty, or not at all?	EASILY... ..1 WITH DIFFICULTY... ..2 NOT AT ALL... ..3	116

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
115	Do you usually read a newspaper or magazine at least once a week?	YES.....1 NO.....2	
116	Do you usually listen to a radio every day?	YES.....1 NO.....2	
117	Do you usually watch television at least once a week?	YES.....1 NO.....2	
118	What religion are you?	MUSLIM.....1 PROTESTANT/CHRISTIAN.....2 CATHOLIC.....3 HINDU.....4 BUDDHIST.....5 OTHER.....6 (SPECIFY)	
119	What is the language used at home?	INDONESIAN.....01 JAVANESE.....02 SUNDANESE.....03 BATAK.....04 MINANG.....05 BUGINESE.....06 OTHER.....96 (SPECIFY)	→201
120	Can you speak Bahasa Indonesia?  IF INTERVIEW IS IN BAHASA INDONESIA, DON'T ASKED THIS QUESTIONS. CIRCLE CODE 1.	YES.....1 NO.....2	

# SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES.....1 NO.....2	→206
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES.....1 NO.....2	→204
203	How many sons live with you? And how many daughters live with you? IF NONE, ENTER '00'.	SONS AT HOME..... DAUGHTERS AT HOME.....	
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES.....1 NO.....2	→206
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE ENTER '00'.	SONS ELSEWHERE..... DAUGHTERS ELSEWHERE.....	
206	Have you ever given birth to a boy or a girl who was born alive but later died? IF NO, PROBE: Any baby who cried or showed any sign of life but survived only a few hours or days?	YES.....1 NO.....2	→208
207	In all, how many boys have died? And how many girls have died? IF NONE, ENTER '00'.	BOYS DEAD..... GIRLS DEAD.....	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, ENTER '00'.	TOTAL.....	
209	CHECK 208:  Just to make sure that I have this right: you have had in TOTAL _____ live births during your life. Is that correct?  YES <input type="checkbox"/> NO <input type="checkbox"/> PROBE AND CORRECT 201-208 AS NECESSARY		
210	CHECK 208:  ONE OR MORE LIVE BIRTH <input type="checkbox"/> V	NO LIVE BIRTHS <input type="checkbox"/>	→223



211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had.

RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE LINES

212	213	214	215	216	217	218	219	220
What name was given to your (first, next) baby?	Were any of these births twins?	Is (NAME) a boy or a girl?	In what month and year was (NAME) born?  PROBE: What is his/her birthday?	Is (NAME) still alive?	How old was (NAME) at his/her last birthday?  RECORD AGE IN COMPLETED YEARS	Is (NAME) living with you?	How old was he/she when he/she died?  IF "1 YEAR", PROBE: How many months old was (NAME)?  RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS, OR YEARS IF TWO YEARS OR ABOVE. IF LESS THAN ONE DAY, WRITE '00' IN DAYS BOX.	CALCULATE THE DIFFERENCE BETWEEN THE YEAR OF BIRTH OF (NAME) AND THE YEAR OF THE PRECEDING BIRTH: IF 4 YEARS OR MORE, ASK:  Were there any other live birth between the birth of (NAME) and (NAME OF PRECEDING BIRTH)
01  (NAME)	SINGLE..1 MULT....2	BOY..1 GIRL..2	MONTH.. <input type="text"/> YEAR..... 1 9	YES....1 NO.....2 v 219	AGE IN YEARS <input type="text"/>	YES.....1 NO.....2	DAYS....1 MONTHS...2 YEARS....3	
02  (NAME)	SINGLE..1 MULT....2	BOY..1 GIRL..2	MONTH.. <input type="text"/> YEAR..... 1 9	YES....1 NO.....2 v 219	AGE IN YEARS <input type="text"/>	YES.....1 NO.....2 (TO 220) <	DAYS....1 MONTHS...2 YEARS....3	YES.....1 NO.....2 (GO TO < NEXT BIRTH)
03  (NAME)	SINGLE..1 MULT....2	BOY..1 GIRL..2	MONTH.. <input type="text"/> YEAR..... 1 9	YES....1 NO.....2 v 219	AGE IN YEARS <input type="text"/>	YES.....1 NO.....2 (TO 220) <	DAYS....1 MONTHS...2 YEARS....3	YES.....1 NO.....2 (GO TO < NEXT BIRTH)
04  (NAME)	SINGLE..1 MULT....2	BOY..1 GIRL..2	MONTH.. <input type="text"/> YEAR..... 1 9	YES....1 NO.....2 v 219	AGE IN YEARS <input type="text"/>	YES.....1 NO.....2 (TO 220) <	DAYS....1 MONTHS...2 YEARS....3	YES.....1 NO.....2 (GO TO < NEXT BIRTH)
05  (NAME)	SINGLE..1 MULT....2	BOY..1 GIRL..2	MONTH.. <input type="text"/> YEAR..... 1 9	YES....1 NO.....2 v 219	AGE IN YEARS <input type="text"/>	YES.....1 NO.....2 (TO 220) <	DAYS....1 MONTHS...2 YEARS....3	YES.....1 NO.....2 (GO TO < NEXT BIRTH)
06  (NAME)	SINGLE..1 MULT....2	BOY..1 GIRL..2	MONTH.. <input type="text"/> YEAR..... 1 9	YES....1 NO.....2 v 219	AGE IN YEARS <input type="text"/>	YES.....1 NO.....2 (TO 220) <	DAYS....1 MONTHS...2 YEARS....3	YES.....1 NO.....2 (GO TO < NEXT BIRTH)
07  (NAME)	SINGLE..1 MULT....2	BOY..1 GIRL..2	MONTH.. <input type="text"/> YEAR..... 1 9	YES....1 NO.....2 v 219	AGE IN YEARS <input type="text"/>	YES.....1 NO.....2 (TO 220) <	DAYS....1 MONTHS...2 YEARS....3	YES.....1 NO.....2 (GO TO < NEXT BIRTH)

212	213	214	215	216	217 IF ALIVE:	218 IF ALIVE:	219 IF DEAD:	220 INTERVAL CHECK:
What name was given to your (first, next) baby?	Were any of these births twins?	Is (NAME) a boy or a girl?	In what month and year was (NAME) born?  PROBE: What is his/her birthday?	Is (NAME) still alive?	How old was (NAME) at his/her last birthday?  RECORD AGE IN COMPLETED YEARS	Is (NAME) living with you?	How old was he/she when he/she died?  IF "1 YEAR", PROBE: How many months old was (NAME)?  RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS, OR YEARS IF TWO YEARS OR ABOVE. IF LESS THAN ONE DAY, WRITE '00' IN DAYS BOX.	CALCULATE THE DIFFERENCE BETWEEN THE YEAR OF BIRTH OF (NAME) AND THE YEAR OF THE PRECEDING BIRTH: IF 4 YEARS OR MORE, ASK:  Were there any other live birth between the birth of (NAME) and (NAME OF PRECEDING BIRTH)?
08    (NAME)	SINGLE..1 MULT....2	BOY..1 GIRL..2	MONTH.. <input type="text"/> YEAR..... <div style="border: 1px solid black; padding: 2px; display: inline-block;">1 9</div>	YES....1 NO.....2 <div style="text-align: center;">↓ 219</div>	AGE IN YEARS <div style="border: 1px solid black; padding: 2px; display: inline-block;"> </div>	YES.....1 NO.....2 (TO 220) ←	DAYS.....1 MONTHS...2 YEARS....3 <div style="border: 1px solid black; padding: 2px; display: inline-block;"> </div>	YES.....1 NO.....2 (GO TO NEXT BIRTH) ←
09    (NAME)	SINGLE..1 MULT....2	BOY..1 GIRL..2	MONTH.. <input type="text"/> YEAR..... <div style="border: 1px solid black; padding: 2px; display: inline-block;">1 9</div>	YES....1 NO.....2 <div style="text-align: center;">↓ 219</div>	AGE IN YEARS <div style="border: 1px solid black; padding: 2px; display: inline-block;"> </div>	YES.....1 NO.....2 (TO 220) ←	DAYS.....1 MONTHS...2 YEARS....3 <div style="border: 1px solid black; padding: 2px; display: inline-block;"> </div>	YES.....1 NO.....2 (GO TO NEXT BIRTH) ←
10    (NAME)	SINGLE..1 MULT....2	BOY..1 GIRL..2	MONTH.. <input type="text"/> YEAR..... <div style="border: 1px solid black; padding: 2px; display: inline-block;">1 9</div>	YES....1 NO.....2 <div style="text-align: center;">↓ 219</div>	AGE IN YEARS <div style="border: 1px solid black; padding: 2px; display: inline-block;"> </div>	YES.....1 NO.....2 (TO 220) ←	DAYS.....1 MONTHS...2 YEARS....3 <div style="border: 1px solid black; padding: 2px; display: inline-block;"> </div>	YES.....1 NO.....2 (GO TO NEXT BIRTH) ←
11    (NAME)	SINGLE..1 MULT....2	BOY..1 GIRL..2	MONTH.. <input type="text"/> YEAR..... <div style="border: 1px solid black; padding: 2px; display: inline-block;">1 9</div>	YES....1 NO.....2 <div style="text-align: center;">↓ 219</div>	AGE IN YEARS <div style="border: 1px solid black; padding: 2px; display: inline-block;"> </div>	YES.....1 NO.....2 (TO 220) ←	DAYS.....1 MONTHS...2 YEARS....3 <div style="border: 1px solid black; padding: 2px; display: inline-block;"> </div>	YES.....1 NO.....2 (GO TO NEXT BIRTH) ←
12    (NAME)	SINGLE..1 MULT....2	BOY..1 GIRL..2	MONTH.. <input type="text"/> YEAR..... <div style="border: 1px solid black; padding: 2px; display: inline-block;">1 9</div>	YES....1 NO.....2 <div style="text-align: center;">↓ 219</div>	AGE IN YEARS <div style="border: 1px solid black; padding: 2px; display: inline-block;"> </div>	YES.....1 NO.....2 (TO 220) ←	DAYS.....1 MONTHS...2 YEARS....3 <div style="border: 1px solid black; padding: 2px; display: inline-block;"> </div>	YES.....1 NO.....2 (GO TO NEXT BIRTH) ←
221	CALCULATE THE DIFFERENCE BETWEEN THE YEAR OF INTERVIEW AND THE YEAR OF THE LAST BIRTH. IF 4 YEARS OR MORE, ASK: Were there any other live birth after (NAME OF LAST CHILD)?							YES.....1 NO.....2
222	COMPARE 208 WITH NUMBER OF BIRTHS ABOVE AND MARK:  <div style="display: flex; justify-content: space-between;"> <div>             NUMBERS ARE SAME <input type="checkbox"/> </div> <div>             NUMBERS ARE DIFFERENT <input type="checkbox"/> → (PROBE AND RECONCILE)           </div> </div> <div style="margin-top: 10px;">             CHECK: FOR EACH LIVE BIRTH (Q.215): YEAR OF BIRTH IS RECORDED              FOR EACH LIVING BIRTH (Q.217): CURRENT AGE IS RECORDED              FOR EACH DEAD BIRTH (Q.219): AGE AT DEATH IS RECORDED              FOR AGE AT DEATH 12 MONTH OR ONE YEAR (Q.219): PROBE TO DETERMINE EXACT NUMBER OF MONTHS           </div> <div style="float: right; margin-top: 20px;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div>							
223	CHECK 215: RECORD NUMBER OF BIRTH SINCE JANUARY 1989. IF NONE, RECORD "0".							<input type="text"/>
224	FOR EACH BIRTH SINCE JANUARY 1989, ENTER "L" IN MONTH OF BIRTH IN COLUMN 1 OF THE CALENDAR, AND "H" IN EACH OF THE 8 PRECEDING MONTHS. WRITE NAME IN FRONT OF THE "L" CODE.							
225	AT THE BOTTOM OF THE CALENDAR, ENTER THE NAME AND BIRTH DATE OF THE LAST CHILD BORN PRIOR TO JANUARY 1989, IF APPLICABLE.							

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
226	Are you pregnant now?	YES.....1 NO.....2 UNSURE.....8	→229
227	How many months pregnant are you?	MONTH.....	
227A	ENTER "H" IN COLUMN 1 OF CALENDAR IN MONTH OF INTERVIEW AND IN EACH PRECEDING MONTH PREGNANT		
228	At the time you became pregnant, did you want to become pregnant <u>then</u> , did you want to wait until <u>later</u> , or did you <u>not want</u> to become pregnant at all?	THEN.....1 LATER.....2 NOT AT ALL.....3	
229	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	YES.....1 NO.....2	→235
230	When did the last such pregnancy end?	MONTH..... YEAR..... 1 9	
231	CHECK 230: LAST PREGNANCY ENDED SINCE JANUARY 1992	LAST PREGNANCY ENDED BEFORE JANUARY 1992	→235
232	How many months pregnant were you when that pregnancy ended?	MONTHS.....	
232A	ENTER "K" IN COLUMN 1 OF CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED, AND "H" FOR THE REMAINING NUMBER OF COMPLETED MONTHS.		
233	Have you ever had any other pregnancies which did not result in a live birth?	YES.....1 NO.....2	→235
234	ASK FOR DATE AND DURATION OF ALL PREGNANCIES WHICH RESULT IN MISCARRIAGE, WAS ABORTED OR ENDED IN A STILLBIRTH SINCE JANUARY 1989. ENTER "K" IN COLUMN 1 OF CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED, AND "H" IN EACH PRECEDING MONTH PREGNANT.		
235	When did your last menstrual period start?	DAYS AGO.....1 WEEKS AGO.....2 MONTHS AGO.....3 YEARS AGO.....4  IN MENOPAUSE.....994 BEFORE LAST PREGNANCY.....995 NEVER MENSTRUATED.....996	



# SECTION 3: KNOWLEDGE AND PRACTICE OF FAMILY PLANNING

301 Now I would like to talk about family planning - the various ways or methods that a couple can use to delay, avoid or end a pregnancy or a birth. Which of these ways or methods have you heard about?

CIRCLE CODE 1 IN 302 FOR EACH METHOD MENTIONED SPONTANEOUSLY.  
THEN PROCEED DOWN THE COLUMN, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY.  
CIRCLE CODE 2 IF METHOD IS RECOGNIZED, AND CODE 3 IF NOT RECOGNIZED.  
THEN, FOR EACH METHOD WITH CODE 1 OR 2 CIRCLED IN 302, ASK 303-304 BEFORE PROCEEDING TO THE NEXT METHOD.

	302 Have you ever heard of (METHOD)?  READ DESCRIPTION OF EACH METHOD.	303 Have you ever used (METHOD)?	304 Where would you go if you wanted to use (METHOD)?  (USE CODES BELOW)*
01 PILL "Women can take a pill every day".	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	<div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> OTHER _____
02 IUD "Women can have a loop or coil placed inside them by a doctor or a nurse".	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	<div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> OTHER _____
03 INJECTIONS "Women can have an injection by a doctor or nurse which stops them from becoming pregnant for several months".	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	<div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> OTHER _____
04 INTRAVAG/DIAPHRAGM/JELLY/FOAM "Women can place a tissue or a diaphragm or cream in the vagina before intercourse".	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	<div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> OTHER _____
05 CONDOM "Men can use a rubber sheath during sexual intercourse".	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	<div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> OTHER _____
06 NORPLANT/IMPLANT "Women can have small rods put in the arm to prevent pregnancy".	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	<div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> OTHER _____
07 FEMALE STERILIZATION/TUBECTOMY "Women can have an operation to avoid having any more children".	YES/SPONT.....1 YES/PROBED.....2 NO.....3	Have you ever had an operation to avoid having any more children? YES.....1 NO.....2	<div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> OTHER _____
08 MALE STERILIZATION/VASECTOMY "Men can have an operation to avoid having any more children".	YES/SPONT.....1 YES/PROBED.....2 NO.....3	Has your husband had an operation to avoid having children? YES.....1 NO.....2	<div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> OTHER _____
09 PERIODIC ABSTINENCE/CALENDAR SYSTEM "Couples can avoid having sexual intercourse on certain days of the month when the woman is more likely to become pregnant".	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	Do you know where a person can obtain advice on how to use periodic abstinence? <div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> OTHER _____
10 WITHDRAWAL "Men can be careful and pull out before climax".	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	<div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> OTHER _____
11 ABORTION/MENSTRUAL REGULATION "Women can do something or have someone do something to end a pregnancy".	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	<div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> OTHER _____
12 ANY OTHER METHODS? "Have you heard of any other ways or methods that women or men can use to avoid pregnancy?".	YES/SPONT.....1 NO.....3	YES.....1 NO.....2	<p>* CODES FOR 304</p> <p><b>GOVERNMENT</b></p> <p>HOSPITAL.....11</p> <p>HEALTH CENTER.....12</p> <p>FP FIELDWORKER.....13</p> <p>FP MOBILE UNIT.....14</p> <p>OTHER.....15 (SPECIFY)</p> <p><b>PRIVATE</b></p> <p>HOSPITAL.....21</p> <p>FP CLINIC.....22</p> <p>DOCTOR.....23</p> <p>MIDWIFE.....24</p> <p>PHARMACY/DRUGSTORE.....25</p> <p>OTHER.....26 (SPECIFY)</p> <p><b>OTHER</b></p> <p>DELIVERY POST.....31</p> <p>HEALTH POST.....32</p> <p>FP POST.....33</p> <p>TRADITIONAL HEALER.....34</p> <p>FRIENDS/RELATIVES.....35</p> <p>OTHER.....96 (SPECIFY)</p> <p>DON'T KNOW.....98</p>

1 \_\_\_\_\_ (SPECIFY)

2 \_\_\_\_\_ (SPECIFY)

3 \_\_\_\_\_ (SPECIFY)

CHECK 302:

IS THERE CODE 1 OR 2

YES ☐ NO ☐

GO TO 303

305 CHECK 303: NOT A SINGLE "YES" (NEVER USED) ☐

AT LEAST ONE "YES" (EVER USED) ☐ SKIP TO 308

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
306	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES.....1 NO.....2	307
306A	ENTER "0" IN COLUMN 1 OF CALENDAR IN EACH BLANK MONTH		330B
307	What have you used or done? (SPECIFY) CORRECT 303-305 (AND ASK 302 IF NECESSARY)	(SPECIFY)	
308	Now I would like to ask you about the first time that you did something or used a method to delay a pregnancy or avoid getting pregnant?  What is the first thing you ever did or method you ever used to delay or avoid getting pregnant?	PILL.....01 IUD.....02 INJECTIONS.....03 IMPLANTS/NORPLANT.....04 INTRAVAG/DIAPHRAGM/FOAM/JELLY.....05 CONDOM.....06 FEMALE STERILIZATION.....07 MALE STERILIZATION.....08 PERIODIC ABSTINENCE.....09 WITHDRAWAL.....10 OTHER.....96 (SPECIFY)	308B
308A	Where did you go to get this method the first time?	<b>GOVERNMENT</b> HOSPITAL.....11 HEALTH CENTER.....12 FP FIELDWORKER.....13 FP MOBILE UNIT.....14 OTHER.....15 (SPECIFY) <b>PRIVATE</b> HOSPITAL.....21 FP CLINIC.....22 DOCTOR.....23 MIDWIFE.....24 PHARMACY/DRUGSTORE.....25 OTHER.....26 (SPECIFY) <b>OTHER</b> DELIVERY POST.....31 HEALTH POST.....32 FP POST.....33 TRADITIONAL HEALER.....34 FRIENDS/RELATIVES.....35 OTHER.....96 (SPECIFY) DON'T KNOW.....98	
308B	How many living children did you have at that time, if any?  IF NONE, ENTER '00'.	NUMBER OF CHILDREN.....	
309	CHECK 303 ITEM 07  WOMAN NOT STERILIZED <input type="checkbox"/> WOMAN STERILIZED <input type="checkbox"/> V		312A
310	CHECK 226:  NOT PREGNANT OR UNSURE <input type="checkbox"/> PREGNANT <input type="checkbox"/> V		328
310A	CHECK 106A:  CURRENTLY MARRIED <input type="checkbox"/> DIVORCED/WIDOWED <input type="checkbox"/> V		330B
311	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES.....1 NO.....2	330B
312	Which method are you using?	PILL.....01 IUD.....02 INJECTIONS.....03 IMPLANT/NORPLANT.....04 INTRAVAG/DIAPHRAGM/FOAM/JELLY.....05 CONDOM.....06 FEMALE STERILIZATION.....07 MALE STERILIZATION.....08 PERIODIC ABSTINENCE.....09 WITHDRAWAL.....10 OTHER.....96 (SPECIFY)	317 316H 317 317 316K 317 317 328
312A	CIRCLE '07' FOR FEMALE STERILIZATION.		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
315A	At the time you first started using the pill, did you consult a doctor or a midwife?	YES.....1 NO.....2 DK.....8	
315B	Do you have a package of pills in the house?	YES.....1 NO.....2	→316
315C	Please show me the package of pills you are now using. (RECORD NAME OF BRAND)	PACKAGE SEEN.....1 BRAND NAME: <input type="text"/> <input type="text"/> PACKAGE NOT SEEN.....2	→316A
316	Why don't you have a package of pills in the house?	RAN OUT.....1 COST TOO MUCH.....2 HUSBAND AWAY.....3 HAS PERIOD.....4 OTHER.....6 (SPECIFY)	→316D
316A	CHECK PACKET FOR PILL USE AND MARK A CORRECT CODE.	PILLS MISSING IN ORDER.....1 PILLS MISSING OUT OF ORDER.....2 NO PILLS MISSING.....3	→316E
316B	Why is it that you have not taken the pills (in order)?	DOESN'T KNOW WHAT TO DO.....1 HEALTH REASONS.....2 FOLLOWING FP FIELDWORKER'S INSTRUCTION.....3 NEW PACKET.....4 MENSTRUATING.....5 OTHER.....6 (SPECIFY)	→316E
316D	SHOW BRAND CHART FOR PILLS: Please tell me which of these is the brand of pills that you are using. (RECORD NAME OF BRAND)	BRAND NAME: <input type="text"/> <input type="text"/> DOESN'T KNOW.....98	
316E	When was the last time you took a pill?	DAYS AGO: <input type="text"/> <input type="text"/> MORE THAN ONE MONTH AGO.....97	
316F	CHECK 316E:  MORE THAN TWO DAYS AGO <input type="checkbox"/> ↓ V	TWO DAYS AGO OR LESS <input type="checkbox"/>	→317
316G	Why aren't you taking the pill these days?	HUSBAND AWAY.....01 FORGOT.....02 HEALTH REASONS.....03 COST TOO MUCH.....04 NO NEED TO TAKE DAILY.....05 RAN OUT.....06 HAS PERIOD.....07 OTHER.....96 (SPECIFY)	→317
316H	When did you last have an injection?	MONTHS AGO..... <input type="text"/> <input type="text"/>	
316I	CHECK 316H:  MORE THAN THREE MONTHS AGO <input type="checkbox"/> ↓ V	THREE MONTHS AGO OR LESS <input type="checkbox"/>	→317
316J	Why haven't you had an injection recently?	HUSBAND AWAY.....1 FORGOT.....2 HEALTH REASONS.....3 COST TOO MUCH.....4 OTHER.....6 (SPECIFY)	→317



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
316K	Please show me the package of condoms that your husband is using. (RECORD NAME OF BRAND)	BRAND NAME: <input type="text"/> NOT ABLE TO SHOW.....98	→317
316L	Why can't you show me the package of condoms that your husband is using?	HUSBAND KEEPS.....1 RAN OUT.....2 OTHER.....6 (SPECIFY)	
316M	SHOW BRAND CHART FOR CONDOMS: Please tell me which of these is the brand of condoms that your husband is using.	BRAND NAME: <input type="text"/> DOESN'T KNOW.....98	
317	How much does (did) it cost you for: <input type="checkbox"/> 1 cycle (packet) of pills <input type="checkbox"/> the IUD <input type="checkbox"/> an injection <input type="checkbox"/> the implant/Norplant <input type="checkbox"/> intravag/diaphragm/foam/jelly <input type="checkbox"/> a package of condoms (contains 3 pieces) <input type="checkbox"/> the sterilization operation  How much was the service and registration fee, if any?	METHOD COST (Rp): <input type="text"/>  FREE METHOD.....9999995 PACKAGE.....9999994  SERVICE COST (Rp): <input type="text"/> FREE SERVICE.....9999996 FREE METHOD AND SERVICE..9999997 DON'T KNOW.....9999998	→317B
317A1	In obtaining (METHOD) did you pay all, part, or nothing?	YES, ALL.....1 YES, PART.....2 NOTHING.....3 DON'T KNOW.....8	→317B →317B
317A2	Who paid for the family planning method you are using?	COMPANY/ASURANCE.....1 OFFICE.....2 FAMILY.....3 OTHER.....6 (SPECIFY) DON'T KNOW.....8	
317B	CHECK 312: CIRCLE FOR METHOD:	PILL.....01 IUD.....02 INJECTIONS.....03 IMPLANT/NORPLANT.....04 INTRAVAG/DIAPHRAGM/FOAM/JELLY..05 CONDOM.....06 FEMALE STERILIZATION.....07 MALE STERILIZATION.....08	→317E
317C	In what month and year did you obtain (METHOD) the last time?	MONTH..... <input type="text"/> YEAR..... <input type="text"/> 19 <input type="text"/>	
317C1	CHECK 312:  IMPLANT/NORPLANT <input type="checkbox"/> V	OTHER METHODS <input type="text"/>	→317D
317C2	CHECK 317C:  BEFORE JANUARY 1989 <input type="checkbox"/> V	SINCE JANUARY 1989 <input type="text"/>	→317D

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
317C3	Why did you not obtain another implant/Norplant?	MENOPAUSE.....01 HUSBAND AWAY.....02 AFRAID.....03 FORGOT.....04 NOT FOUND.....05 COST TOO MUCH.....06 AVAILABILITY.....07 OTHER.....96 (SPECIFY) DON'T KNOW.....98	
317D	Where did you obtain (METHOD) the last time?  RECORD NAME OF METHOD SOURCE. PROBE TYPE OF METHOD SOURCE AND CIRCLE CORRECT CODE.  _____ (NAME OF PLACE)	<u>GOVERNMENT</u> HOSPITAL.....11 HEALTH CENTER.....12 FP FIELDWORKER.....13 FP MOBILE UNIT.....14 OTHER.....15 (SPECIFY)  <u>PRIVATE</u> HOSPITAL.....21 FP CLINIC.....22 DOCTOR.....23 MIDWIFE.....24 PHARMACY/DRUGSTORE.....25 OTHER.....26 (SPECIFY)  <u>OTHER</u> DELIVERY POST.....31 HEALTH POST.....32 FP POST.....33 TRADITIONAL HEALER.....34 FRIENDS/RELATIVES.....35 OTHER.....96 (SPECIFY) DON'T KNOW.....98	
317E	What is the main reason you decided to use (CURRENT METHOD IN 312) rather than some other methods of family planning?	RECOMMENDATION OF FAMILY PLANNING WORKER.....01 RECOMMENDATION OF FRIENDS/RELATIVES.....02 SIDE EFFECTS OF OTHER METHODS.....03 CONVENIENCE.....04 ACCESS/AVAILABILITY.....05 LOWER COST.....06 WANTED PERMANENT METHOD.....07 HUSBAND PREFERRED.....08 WANTED MORE EFFECTIVE METHOD.....09 OTHER.....96 (SPECIFY) DON'T KNOW.....98	
317F	Are you having any health problems in using (CURRENT METHOD IN 312)?	YES.....1 NO.....2	→317H
317G	What is the main health problem (CURRENT METHOD IN 312)?	WEIGHT GAIN.....01 WEIGHT LOSS.....02 BLEEDING.....03 HYPERTENSION.....04 HEADACHE.....05 QUEASY.....06 AMENORRHEA.....07 WEAK/TIRED.....08 OTHER.....96 (SPECIFY) DON'T KNOW.....98	
317H	Are you having any other problems in using (CURRENT METHOD IN 312)?	YES.....1 NO.....2	→317J
317I	What is the main problem?	HUSBAND DISAPPROVES.....01 ACCESSIBILITY/AVAILABILITY.....02 COST TOO MUCH.....03 INCONVENIENT TO USE.....04 STERILIZED, BUT WANTS CHILDREN.....05 OTHER.....96 (SPECIFY) DON'T KNOW.....98	
317J	CHECK 312 AND 312A:	RESPONDENT/HUSBAND STERILIZED <input type="checkbox"/>	NEITHER STERILIZED <input type="checkbox"/>

→323

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO																																																												
318	Where did the sterilization take place?  WRITE THE NAME OF PLACE. PROBE TO IDENTIFY THE TYPE OF PLACE AND CIRCLE THE APPROPRIATE CODE.  _____ (NAME OF PLACE)	GOVERNMENT HOSPITAL.....11 HEALTH CENTER.....12 PRIVATE HOSPITAL.....21 PRIVATE CLINIC.....22 PRIVATE DOCTOR.....23 OTHER.....96 (SPECIFY)  DON'T KNOW.....98																																																													
319	Do you regret that (YOU/YOUR HUSBAND) had the operation not to have any (more) children?	YES.....1 NO.....2	321																																																												
320	Why do (YOU/YOUR HUSBAND) regret the operation?	RESPONDENT WANTS ANOTHER CHILD.....1 HUSBAND WANTS ANOTHER CHILD.....2 SIDE EFFECTS.....3 CHILD DIED.....4 OTHER.....6 (SPECIFY)																																																													
321	In what month and year was the sterilization performed?	MONTH..... YEAR..... 1 9																																																													
322	CHECK: 321  STERILIZED BEFORE JANUARY 1992 <input type="checkbox"/> V ENTER CODE FOR STERILIZATION (CODE 7 OR 8) IN MONTH OF INTERVIEW IN COLUMN 1 OF THE CALENDAR AND EACH MONTH BACK TO JANUARY 1989	STERILIZED SINCE JANUARY 1992 <input type="checkbox"/> V ENTER CODE FOR STERILIZATION (CODE 7 OR 8) IN MONTH OF INTERVIEW OF THE CALENDAR AND IN EACH MONTH BACK TO THE DATE OF THE OPERATION																																																													
323	People select the place where they get family planning services for various reasons. The place selected may be more convenient or give better services or is cheaper.  In your case, what was the main reason you went to the place you did rather than to some other places?  RECORD RESPONSE AND CIRCLE CODE.  _____  Any other reasons?  RECORD RESPONSE AND CIRCLE CODE.  _____	<table border="0"> <thead> <tr> <th></th> <th>MAIN REASON</th> <th>OTHER REASON</th> </tr> </thead> <tbody> <tr> <td colspan="3"><b>ACCESS-RELATED REASONS</b></td> </tr> <tr> <td>CLOSER TO HOME.....</td> <td>01</td> <td>01</td> </tr> <tr> <td>CLOSER TO WORK.....</td> <td>02</td> <td>02</td> </tr> <tr> <td>AVAILABILITY OF TRANSPORT.....</td> <td>03</td> <td>03</td> </tr> <tr> <td>LONGER HOURS OF OPERATION.....</td> <td>04</td> <td>04</td> </tr> <tr> <td>USE OTHER SERVICES AT THE FACILITY.....</td> <td>05</td> <td>05</td> </tr> <tr> <td colspan="3"><b>SERVICE-RELATED REASONS</b></td> </tr> <tr> <td>STAFF MORE COMPETENT/FRIENDLY.....</td> <td>06</td> <td>06</td> </tr> <tr> <td>CLEANER.....</td> <td>07</td> <td>07</td> </tr> <tr> <td>OFFERS MORE PRIVACY.....</td> <td>08</td> <td>08</td> </tr> <tr> <td>SHORTER WAITING TIME.....</td> <td>09</td> <td>09</td> </tr> <tr> <td>LOWER COST.....</td> <td>10</td> <td>10</td> </tr> <tr> <td>WANTED ANONYMITY.....</td> <td>11</td> <td>11</td> </tr> <tr> <td>OTHER.....</td> <td>96</td> <td></td> </tr> <tr> <td colspan="3">(SPECIFY)</td> </tr> <tr> <td>NO OTHER REASON.....</td> <td>12</td> <td></td> </tr> <tr> <td>OTHER.....</td> <td>96</td> <td></td> </tr> <tr> <td colspan="3">(SPECIFY)</td> </tr> <tr> <td>DON'T KNOW.....</td> <td>98</td> <td></td> </tr> </tbody> </table>		MAIN REASON	OTHER REASON	<b>ACCESS-RELATED REASONS</b>			CLOSER TO HOME.....	01	01	CLOSER TO WORK.....	02	02	AVAILABILITY OF TRANSPORT.....	03	03	LONGER HOURS OF OPERATION.....	04	04	USE OTHER SERVICES AT THE FACILITY.....	05	05	<b>SERVICE-RELATED REASONS</b>			STAFF MORE COMPETENT/FRIENDLY.....	06	06	CLEANER.....	07	07	OFFERS MORE PRIVACY.....	08	08	SHORTER WAITING TIME.....	09	09	LOWER COST.....	10	10	WANTED ANONYMITY.....	11	11	OTHER.....	96		(SPECIFY)			NO OTHER REASON.....	12		OTHER.....	96		(SPECIFY)			DON'T KNOW.....	98		
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328	Between the first day of a woman's period and the first day of her next period, are there certain times when she has a greater chance of becoming pregnant than other times?	YES.....1 NO.....2 DON'T KNOW.....3	330A																																																												
328A	During which times of the monthly cycle does a woman have the greatest chance of becoming pregnant?	DURING HER PERIOD.....1 RIGHT AFTER HER PERIOD HAS ENDED.....2 IN THE MIDDLE OF THE CYCLE.....3 JUST BEFORE HER PERIOD BEGINS.....4 OTHER.....6 (SPECIFY) DON'T KNOW.....8																																																													
328A1	CHECK 312:  PERIODIC ABSTINENCE OR WITHDRAWAL <input type="checkbox"/>	OTHER METHODS <input type="checkbox"/>	330A																																																												
328B	Do you abstain from sex on days when you are certain that you have a greater chance of becoming pregnant?	YES.....1 NO.....2	330A																																																												
328C	How do you determine which days of your monthly cycle not to have sexual relations?	BASED ON CALENDAR.....1 BASED ON BODY TEMPERATURE.....2 BASED ON CERVICAL MUCUS (BILLINGS METHOD).....3 BASED ON BODY TEMPERATURE AND CERVICAL MUCUS.....4 OTHER.....6 (SPECIFY) NO SPECIFIC SYSTEM.....8																																																													



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
330A	<p>ENTER METHOD CODE FROM 312 IN CURRENT MONTH IN COLUMN 1 OF CALENDAR. THEN DETERMINE WHEN SHE STARTED USING THIS METHOD THIS TIME. ENTER METHOD CODE IN EACH MONTH OF USE.</p> <p>ILLUSTRATIVE QUESTIONS:</p> <ul style="list-style-type: none"> <li>- When did you start using this method continuously?</li> <li>- How long have you been using this method continuously?</li> </ul>		
330B	<p>I would like to ask some questions about all of the methods you used to avoid getting pregnant in the last five years.</p> <p>USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 1989.</p> <p>USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS. IN EACH MONTH, ENTER CODE FOR METHOD OR "0" FOR NONUSE IN COLUMN 1. IN COLUMN 2, ENTER CODES FOR DISCONTINUATION NEXT TO LAST MONTH OF USE.</p> <p>NUMBER OF CODES ENTERED IN COLUMN 2 MUST BE THE SAME AS THE NUMBER OF INTERRUPTIONS OF CONTRACEPTIVE USE IN COLUMN 1.</p> <p>ASK WHY SHE STOPPED USING THE METHOD. IF A PREGNANCY FOLLOWED, ASK WHETHER SHE BECAME PREGNANT UNINTENTIONALLY WHILE USING THE METHOD OR DELIBERATELY STOPPED TO GET PREGNANT.</p> <p>ILLUSTRATIVE QUESTIONS:</p> <p>COLUMN 1:</p> <ul style="list-style-type: none"> <li>-When was the last time you used a method? Which method was that?</li> <li>-When did you start using that method? How long after the birth of (NAME)?</li> <li>-How long did you use the method then?</li> </ul> <p>COLUMN 2:</p> <ul style="list-style-type: none"> <li>-Why did you stop using the (METHOD)?</li> <li>-Did you become pregnant while using (METHOD), or did you stop to get pregnant, or stop for some other reason?</li> </ul> <p>IF DELIBERATELY STOPPED TO BECOME PREGNANT, ASK:</p> <p>"How many months did it take you to get pregnant after you stopped using (METHOD)?</p> <p>ENTER "0" IN EACH SUCH MONTH IN COLUMN 1.</p>		
330C	Did you attend the group which are family planning group?	YES.....1 NO.....2	→330D
330C1	What is the name of group which you attend the last time?	NAME _____ (SPECIFY)	
330C2	When did the last time you attend a meeting of that group?	MONTH..... YEAR..... 1 9	
330C3	Does the group collect money for use in the family planning activities?	YES.....1 NO.....2	
330D	Have you ever seen a sign or heard about Blue Circle?	YES.....1 NO.....2 DON'T KNOW.....8	→330E
330D1	Can you tell me what it is?	PRIVATE FAMILY PLANNING SERVICE..1 OTHER.....2 (SPECIFY) DON'T KNOW.....8	
330E	Have you ever seen a sign or heard about Golden Circle?	YES.....1 NO.....2 DON'T KNOW.....8	→331
330E1	Can you tell me what it is?	PRIVATE FAMILY PLANNING SERVICE..1 OTHER.....2 (SPECIFY) DON'T KNOW.....8	
331	<p>CHECK 226:</p> <p>PREGNANT <input type="checkbox"/></p> <p>NOT PREGNANT OR UNSURE <input type="checkbox"/></p> <p>V Have you contacted/ever been contacted by a family planning worker during the six months before you became pregnant?</p> <p>V Have you contacted/ever been contacted by a family planning worker during the past six months?</p>	YES.....1 NO.....2	
331A	<p>CHECK 226:</p> <p>PREGNANT <input type="checkbox"/></p> <p>NOT PREGNANT OR UNSURE <input type="checkbox"/></p> <p>V Have you ever visited a health facility during the six months before you became pregnant?</p> <p>V Have you ever visited a health facility during the past six months?</p>	YES.....1 NO.....2	→332
331B	Did anyone at the health facility speak to you about family planning methods?	YES.....1 NO.....2	
332	Do you think that breastfeeding can affect a woman's chance of becoming pregnant?	YES.....1 NO.....2 DON'T KNOW.....3	→335
332A	Do you think a woman's chance of becoming pregnant is increased, decreased, or not affected?	INCREASED.....1 DECREASED.....2 NOT AFFECT.....3 DEPENDS.....4 DON'T KNOW.....8	→335

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO																																																																																							
333	CHECK 208: ONE OR MORE BIRTHS <input type="checkbox"/> V	NO BIRTHS <input type="checkbox"/>	→335																																																																																							
334	Have you ever relied on breastfeeding as a method of avoiding pregnancy?	YES.....1 NO.....2																																																																																								
335	CHECK 106A: CURRENTLY MARRIED <input type="checkbox"/> V	DIVORCED/ WIDOWED <input type="checkbox"/>	→337																																																																																							
335A	CHECK 312: NOT ASKED/NOT USING A MODERN METHOD <input type="checkbox"/> V	CURRENTLY USING A METHOD <input type="checkbox"/>	→337																																																																																							
335B	What is the main reason you are not using a contraceptive method to avoid pregnancy?  Any other reasons?  RECORD MAIN AND OTHER REASON IN SEPARATE COLUMNS.	<table border="0"> <thead> <tr> <th></th> <th>MAIN REASON</th> <th>OTHER REASON</th> </tr> </thead> <tbody> <tr> <td colspan="3"><b>LACK OF KNOWLEDGE</b></td> </tr> <tr> <td>DON'T KNOW METHOD.....</td> <td>01</td> <td>01</td> </tr> <tr> <td>DON'T KNOW SOURCE.....</td> <td>02</td> <td>02</td> </tr> <tr> <td colspan="3"><b>OPPOSITION TO USE</b></td> </tr> <tr> <td>RESPONDENT OPPOSED.....</td> <td>03</td> <td>03</td> </tr> <tr> <td>HUSBAND OPPOSED.....</td> <td>04</td> <td>04</td> </tr> <tr> <td>OTHERS OPPOSED.....</td> <td>05</td> <td>05</td> </tr> <tr> <td>RELIGIOUS PROHIBITION.....</td> <td>06</td> <td>06</td> </tr> <tr> <td colspan="3"><b>FERTILITY-RELATED REASONS</b></td> </tr> <tr> <td>MENOPAUSAL/HYSTERECTOMY..</td> <td>07</td> <td>07</td> </tr> <tr> <td>SUBFECUND/INFECUND.....</td> <td>08</td> <td>08</td> </tr> <tr> <td>POSTPARTUM/BREASTFEEDING..</td> <td>09</td> <td>09</td> </tr> <tr> <td>INFREQUENT SEX.....</td> <td>10</td> <td>10</td> </tr> <tr> <td>WANT CHILDREN.....</td> <td>11</td> <td>11</td> </tr> <tr> <td colspan="3"><b>METHOD-RELATED REASONS</b></td> </tr> <tr> <td>HEALTH CONCERNS.....</td> <td>12</td> <td>12</td> </tr> <tr> <td>FEAR OF SIDE EFFECTS.....</td> <td>13</td> <td>13</td> </tr> <tr> <td>LACK OF ACCESS/TOO FAR..</td> <td>14</td> <td>14</td> </tr> <tr> <td>COST TOO MUCH.....</td> <td>15</td> <td>15</td> </tr> <tr> <td>INCONVENIENT TO USE.....</td> <td>16</td> <td>16</td> </tr> <tr> <td>GAIN/LOSE WEIGHT.....</td> <td>17</td> <td>17</td> </tr> <tr> <td>PREGNANT.....</td> <td>18</td> <td>18</td> </tr> <tr> <td>NO OTHER REASON.....</td> <td>19</td> <td>19</td> </tr> <tr> <td>OTHER.....</td> <td>96</td> <td>96</td> </tr> <tr> <td colspan="2">(SPECIFY)</td> <td></td> </tr> <tr> <td>OTHER.....</td> <td>96</td> <td>96</td> </tr> <tr> <td colspan="2">(SPECIFY)</td> <td></td> </tr> <tr> <td>DON'T KNOW.....</td> <td>98</td> <td>98</td> </tr> </tbody> </table>		MAIN REASON	OTHER REASON	<b>LACK OF KNOWLEDGE</b>			DON'T KNOW METHOD.....	01	01	DON'T KNOW SOURCE.....	02	02	<b>OPPOSITION TO USE</b>			RESPONDENT OPPOSED.....	03	03	HUSBAND OPPOSED.....	04	04	OTHERS OPPOSED.....	05	05	RELIGIOUS PROHIBITION.....	06	06	<b>FERTILITY-RELATED REASONS</b>			MENOPAUSAL/HYSTERECTOMY..	07	07	SUBFECUND/INFECUND.....	08	08	POSTPARTUM/BREASTFEEDING..	09	09	INFREQUENT SEX.....	10	10	WANT CHILDREN.....	11	11	<b>METHOD-RELATED REASONS</b>			HEALTH CONCERNS.....	12	12	FEAR OF SIDE EFFECTS.....	13	13	LACK OF ACCESS/TOO FAR..	14	14	COST TOO MUCH.....	15	15	INCONVENIENT TO USE.....	16	16	GAIN/LOSE WEIGHT.....	17	17	PREGNANT.....	18	18	NO OTHER REASON.....	19	19	OTHER.....	96	96	(SPECIFY)			OTHER.....	96	96	(SPECIFY)			DON'T KNOW.....	98	98	→337
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336A	Do you intend to use a family planning method to delay or avoid pregnancy within the next 12 months?	YES.....1 NO.....2 DON'T KNOW.....8	→336C																																																																																							
336B	Do you intend to use a family planning method to delay or avoid pregnancy at any time in the future?	YES.....1 NO.....2 DON'T KNOW.....8	→3360 →337																																																																																							
336C	When you use a method, which method would you prefer to use?	<table border="0"> <tbody> <tr><td>PILL.....</td><td>01</td></tr> <tr><td>IUD.....</td><td>02</td></tr> <tr><td>INJECTIONS.....</td><td>03</td></tr> <tr><td>IMPLANT/NORPLANT.....</td><td>04</td></tr> <tr><td>INTRAVAG/DIAPHRAGM/FOAM/JELLY..</td><td>05</td></tr> <tr><td>CONDOM.....</td><td>06</td></tr> <tr><td>FEMALE STERILIZATION.....</td><td>07</td></tr> <tr><td>MALE STERILIZATION.....</td><td>08</td></tr> <tr><td>PERIODIC ABSTINENCE.....</td><td>09</td></tr> <tr><td>WITHDRAWAL.....</td><td>10</td></tr> <tr><td>OTHER.....</td><td>96</td></tr> <tr><td colspan="2">(SPECIFY)</td></tr> <tr><td>UNSURE.....</td><td>98</td></tr> </tbody> </table>	PILL.....	01	IUD.....	02	INJECTIONS.....	03	IMPLANT/NORPLANT.....	04	INTRAVAG/DIAPHRAGM/FOAM/JELLY..	05	CONDOM.....	06	FEMALE STERILIZATION.....	07	MALE STERILIZATION.....	08	PERIODIC ABSTINENCE.....	09	WITHDRAWAL.....	10	OTHER.....	96	(SPECIFY)		UNSURE.....	98	→337																																																													
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336D	<p>What is the main reason you are not using a family planning method?</p> <p>Any other reasons?</p> <p>RECORD MAIN AND OTHER REASONS IN SEPARATE COLUMNS.</p>	<table border="1"> <thead> <tr> <th></th> <th>MAIN REASON</th> <th>OTHER REASON</th> </tr> </thead> <tbody> <tr> <td colspan="3"><b>LACK OF KNOWLEDGE</b></td> </tr> <tr> <td>DON'T KNOW METHOD.....</td> <td>01</td> <td>01</td> </tr> <tr> <td>DON'T KNOW SOURCE.....</td> <td>02</td> <td>02</td> </tr> <tr> <td colspan="3"><b>OPPOSITION TO USE</b></td> </tr> <tr> <td>RESPONDENT OPPOSED.....</td> <td>03</td> <td>03</td> </tr> <tr> <td>HUSBAND OPPOSED.....</td> <td>04</td> <td>04</td> </tr> <tr> <td>OTHERS OPPOSED.....</td> <td>05</td> <td>05</td> </tr> <tr> <td>RELIGIOUS PROHIBITION....</td> <td>06</td> <td>06</td> </tr> <tr> <td colspan="3"><b>FERTILITY-RELATED REASONS</b></td> </tr> <tr> <td>SUBFECUND/INFECUND.....</td> <td>07</td> <td>07</td> </tr> <tr> <td>POSTPARTUM/BREASTFEEDING..</td> <td>08</td> <td>08</td> </tr> <tr> <td>INFREQUENT SEX.....</td> <td>09</td> <td>09</td> </tr> <tr> <td>WANT CHILDREN.....</td> <td>10</td> <td>10</td> </tr> <tr> <td colspan="3"><b>METHOD-RELATED REASONS</b></td> </tr> <tr> <td>HEALTH CONCERNS.....</td> <td>11</td> <td>11</td> </tr> <tr> <td>FEAR OF SIDE EFFECTS.....</td> <td>12</td> <td>12</td> </tr> <tr> <td>LACK OF ACCESS/TOO FAR....</td> <td>13</td> <td>13</td> </tr> <tr> <td>COST TOO MUCH.....</td> <td>14</td> <td>14</td> </tr> <tr> <td>INCONVENIENT TO USE.....</td> <td>15</td> <td>15</td> </tr> <tr> <td>GAIN/LOSE WEIGHT.....</td> <td>16</td> <td>16</td> </tr> <tr> <td>NO OTHER REASON.....</td> <td>17</td> <td></td> </tr> <tr> <td>OTHER.....</td> <td>96</td> <td></td> </tr> <tr> <td colspan="3">(SPECIFY)</td> </tr> <tr> <td>OTHER.....</td> <td>96</td> <td></td> </tr> <tr> <td colspan="3">(SPECIFY)</td> </tr> <tr> <td>DON'T KNOW.....</td> <td>98</td> <td></td> </tr> </tbody> </table>		MAIN REASON	OTHER REASON	<b>LACK OF KNOWLEDGE</b>			DON'T KNOW METHOD.....	01	01	DON'T KNOW SOURCE.....	02	02	<b>OPPOSITION TO USE</b>			RESPONDENT OPPOSED.....	03	03	HUSBAND OPPOSED.....	04	04	OTHERS OPPOSED.....	05	05	RELIGIOUS PROHIBITION....	06	06	<b>FERTILITY-RELATED REASONS</b>			SUBFECUND/INFECUND.....	07	07	POSTPARTUM/BREASTFEEDING..	08	08	INFREQUENT SEX.....	09	09	WANT CHILDREN.....	10	10	<b>METHOD-RELATED REASONS</b>			HEALTH CONCERNS.....	11	11	FEAR OF SIDE EFFECTS.....	12	12	LACK OF ACCESS/TOO FAR....	13	13	COST TOO MUCH.....	14	14	INCONVENIENT TO USE.....	15	15	GAIN/LOSE WEIGHT.....	16	16	NO OTHER REASON.....	17		OTHER.....	96		(SPECIFY)			OTHER.....	96		(SPECIFY)			DON'T KNOW.....	98		
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337	<p>In the last sixth months, have you ever heard about family planning information from:</p> <p>Radio?</p> <p>Television?</p> <p>Newspaper/magazine?</p> <p>Poster?</p> <p>Pamphlet?</p> <p>Family planning field worker?</p> <p>Teacher?</p> <p>Community leader?</p> <p>Religious leader?</p> <p>Doctor?</p> <p>Midwife?</p> <p>Village leader?</p> <p>Women group (PKK)?</p> <p>Pharmacy?</p>	<table border="1"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>RADIO.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>TELEVISION.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>NEWSPAPER/MAGAZINE.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>POSTER.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>PAMPHLET.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>FP OFFICER.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>TEACHER.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>COMMUNITY LEADER.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>RELIGIOUS LEADER.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>DOCTOR.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>MIDWIFE.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>VILLAGE LEADER.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>WOMEN GROUP.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>PHARMACY.....</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	RADIO.....	1	2	TELEVISION.....	1	2	NEWSPAPER/MAGAZINE.....	1	2	POSTER.....	1	2	PAMPHLET.....	1	2	FP OFFICER.....	1	2	TEACHER.....	1	2	COMMUNITY LEADER.....	1	2	RELIGIOUS LEADER.....	1	2	DOCTOR.....	1	2	MIDWIFE.....	1	2	VILLAGE LEADER.....	1	2	WOMEN GROUP.....	1	2	PHARMACY.....	1	2																																					
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337A	<p>Of the sources I am going to mention, which do you think are an appropriate source for family planning information?</p> <p>READ RESPONSES.</p>	<table border="1"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>RADIO.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>TELEVISION.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>NEWSPAPER/MAGAZINE.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>POSTER.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>PAMPHLET.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>FP OFFICER.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>TEACHER.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>COMMUNITY LEADER.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>RELIGIOUS LEADER.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>DOCTOR.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>MIDWIFE.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>VILLAGE LEADER.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>WOMEN GROUP.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>PHARMACY.....</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	RADIO.....	1	2	TELEVISION.....	1	2	NEWSPAPER/MAGAZINE.....	1	2	POSTER.....	1	2	PAMPHLET.....	1	2	FP OFFICER.....	1	2	TEACHER.....	1	2	COMMUNITY LEADER.....	1	2	RELIGIOUS LEADER.....	1	2	DOCTOR.....	1	2	MIDWIFE.....	1	2	VILLAGE LEADER.....	1	2	WOMEN GROUP.....	1	2	PHARMACY.....	1	2																																					
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337B	<p>During the last six months, have you ever talked about family planning practice with your friends or family?</p>	<p>YES.....1</p> <p>NO.....2→337D</p>																																																																																		
337C	<p>With whom?</p> <p>Anyone else?</p> <p>CIRCLE EACH MENTIONED.</p>	<p>HUSBAND.....A</p> <p>MOTHER.....B</p> <p>FATHER.....C</p> <p>SISTER.....D</p> <p>BROTHER.....E</p> <p>DAUGHTER.....F</p> <p>PARENT-IN-LAW.....G</p> <p>FRIEND/NEIGHBOR.....H</p> <p>OTHER.....X</p> <p>(SPECIFY)</p>																																																																																		
337D	<p>In your opinion, among the ever-married women you know, are most of them, some of them, or none of them using a family planning method?</p>	<p>MOST.....1</p> <p>SOME.....2</p> <p>NONE.....3</p> <p>DON'T KNOW.....8</p>																																																																																		
337E	<p>Have you ever recommended family planning to your friends, family, or anyone?</p>	<p>YES.....1</p> <p>NO.....2</p>																																																																																		



# SECTION 4A. PREGNANCY AND BREASTFEEDING

401 CHECK 215:

ONE OR MORE LIVE BIRTHS  
SINCE JANUARY 1992 ☐

NO LIVE BIRTHS  
SINCE JANUARY 1992 ☐

(SKIP TO 481)

402 ENTER THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH SINCE JANUARY 1989 IN THE TABLE.  
ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS,  
USE ADDITIONAL FORMS).

Now I would like to ask you some questions about the health of all your children born in the past five years.  
We will talk about one child at a time.

402A	LINE NUMBER FROM Q. 212	LINE NUMBER.....	LINE NUMBER.....	LINE NUMBER.....
402B	FROM Q. 212	LAST BIRTH NAME	SECOND-FROM-LAST-BIRTH NAME	NEXT-TO-LAST-BIRTH NAME
402C	FROM Q. 216	ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/>	ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/>	ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/>
403	At the time you became pregnant with (NAME), did you want to become pregnant then, did you want to wait until later or did you want no more children at all?	THEN.....1 (SKIP TO 405)<..... LATER.....2 NO MORE.....3 (SKIP TO 405)<.....	THEN.....1 (SKIP TO 405)<..... LATER.....2 NO MORE.....3 (SKIP TO 405)<.....	THEN.....1 (SKIP TO 405)<..... LATER.....2 NO MORE.....3 (SKIP TO 405)<.....
404	How long would you like to have waited before you have (NAME)?	MONTH.....1 YEAR.....2 DON'T KNOW.....998	MONTH.....1 YEAR.....2 DON'T KNOW.....998	MONTH.....1 YEAR.....2 DON'T KNOW.....998
405	When you were pregnant with (NAME), did you see anyone for antenatal care for this pregnancy?  IF YES: Whom did you see?  Anyone else?	<u>HEALTH PROFESSIONAL</u> DOCTOR.....A NURSE/MIDWIFE.....B AUXILIARY NURSE/MIDWIFE.....C <u>OTHER PERSON</u> TRADITIONAL HEALER.....D OTHER.....X (SPECIFY) NEVER.....Y (SKIP TO 409)<.....	<u>HEALTH PROFESSIONAL</u> DOCTOR.....A NURSE/MIDWIFE.....B AUXILIARY NURSE/MIDWIFE.....C <u>OTHER PERSON</u> TRADITIONAL HEALER.....D OTHER.....X (SPECIFY) NEVER.....Y (SKIP TO 409)<.....	<u>HEALTH PROFESSIONAL</u> DOCTOR.....A NURSE/MIDWIFE.....B AUXILIARY NURSE/MIDWIFE.....C <u>OTHER PERSON</u> TRADITIONAL HEALER.....D OTHER.....X (SPECIFY) NEVER.....Y (SKIP TO 409)<.....
405A	Where did you go for antenatal care for this pregnancy?	GOVERNMENT HOSPITAL.....11 HEALTH CENTER.....12 DELIVERY POST.....13 HEALTH POST.....14 PRIVATE HOSPITAL.....21 PRIVATE CLINIC.....22 PRIVATE DOCTOR.....23 MIDWIFE/AUXILIARY MIDWIFE.....24 OTHER.....96 (SPECIFY)	GOVERNMENT HOSPITAL.....11 HEALTH CENTER.....12 DELIVERY POST.....13 HEALTH POST.....14 PRIVATE HOSPITAL.....21 PRIVATE CLINIC.....22 PRIVATE DOCTOR.....23 MIDWIFE/AUXILIARY MIDWIFE.....24 OTHER.....96 (SPECIFY)	GOVERNMENT HOSPITAL.....11 HEALTH CENTER.....12 DELIVERY POST.....13 HEALTH POST.....14 PRIVATE HOSPITAL.....21 PRIVATE CLINIC.....22 PRIVATE DOCTOR.....23 MIDWIFE/AUXILIARY MIDWIFE.....24 OTHER.....96 (SPECIFY)
406	Were you given an antenatal card (KMS) for pregnant mother for this pregnancy?	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
407	How many months pregnant were you when you first received antenatal care?	MONTH..... DON'T KNOW.....98	MONTH..... DON'T KNOW.....98	MONTH..... DON'T KNOW.....98
408	How many times did you receive antenatal care during this pregnancy?	TIMES..... DON'T KNOW.....98	TIMES..... DON'T KNOW.....98	TIMES..... DON'T KNOW.....98
409	When you were pregnant with (NAME) were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?  (CHECK HEALTH CARD)	YES.....1 NO.....2 (SKIP TO 410A)<..... DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 410A)<..... DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 410A)<..... DON'T KNOW.....8

		LAST BIRTH NAME _____	SECOND-FROM-LAST-BIRTH NAME _____	NEXT-TO-LAST-BIRTH NAME _____
410	How many times did you get this injection? RECORD NUMBER OF INJECTION FROM HEALTH CARD, IF AVAILABLE	TIMES..... <input type="text"/> DON'T KNOW.....8	TIMES..... <input type="text"/> DON'T KNOW.....8	TIMES..... <input type="text"/> DON'T KNOW.....8
410A	Have you ever received iron pills (increasing blood) when you were pregnant with (NAME)?	YES.....1 NO.....2 (SKIP TO 411)←		
410B	How many iron pills did you take during your pregnancy with (NAME)?	TOTAL..... <input type="text"/> DON'T KNOW.....998		
410C	How many days during the last month did you take the iron pills?	DAYS..... <input type="text"/> TIDAK TAHU.....98		
411	Where did you give birth to (NAME)?	<u>HOME</u> YOUR HOME.....11 OTHER HOME.....12 <u>GOVERNMENT</u> HOSPITAL.....21 HEALTH CENTER.....22 DELIVERY POST.....23 OTHER.....24 (SPECIFY) <u>PRIVATE</u> HOSPITAL.....31 CLINIC.....32 OTHER.....33 (SPECIFY)	<u>HOME</u> YOUR HOME.....11 OTHER HOME.....12 <u>GOVERNMENT</u> HOSPITAL.....21 HEALTH CENTER.....22 DELIVERY POST.....23 OTHER.....24 (SPECIFY) <u>PRIVATE</u> HOSPITAL.....31 CLINIC.....32 OTHER.....33 (SPECIFY)	<u>HOME</u> YOUR HOME.....11 OTHER HOME.....12 <u>GOVERNMENT</u> HOSPITAL.....21 HEALTH CENTER.....22 DELIVERY POST.....23 OTHER.....24 (SPECIFY) <u>PRIVATE</u> HOSPITAL.....31 CLINIC.....32 OTHER.....33 (SPECIFY)
412	Who assisted with the delivery of (NAME)?  Anyone else?  PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS ASSISTING.	DOCTOR.....A MIDWIFE.....B TRADITIONAL BIRTH ATTENDANT.....C RELATIVE.....D OTHER.....X (SPECIFY) NO ONE.....Y	DOCTOR.....A MIDWIFE.....B TRADITIONAL BIRTH ATTENDANT.....C RELATIVE.....D OTHER.....X (SPECIFY) NO ONE.....Y	DOCTOR.....A MIDWIFE.....B TRADITIONAL BIRTH ATTENDANT.....C RELATIVE.....D OTHER.....X (SPECIFY) NO ONE.....Y
412A	At the time of the birth of (NAME), did you have:	YES NO DON'T KNOW Labor, that is the strong and regular contractions lasting more than one day & one night? 1 2 8 A lot more vaginal bleeding than normal following child-birth (more than 3 cloths)? 1 2 8 A high fever and foul smelling vaginal discharge? 1 2 8 Convulsions with loss of consciousness? 1 2 8 Any other complications? IF YES, SPECIFY 1 2 8 (SPECIFY)	YES NO DON'T KNOW Labor, that is the strong and regular contractions lasting more than one day & one night? 1 2 8 A lot more vaginal bleeding than normal following child-birth (more than 3 cloths)? 1 2 8 A high fever and foul smelling vaginal discharge? 1 2 8 Convulsions with loss of consciousness? 1 2 8 Any other complications? IF YES, SPECIFY 1 2 8 (SPECIFY)	YES NO DON'T KNOW Labor, that is the strong and regular contractions lasting more than one day & one night? 1 2 8 A lot more vaginal bleeding than normal following child-birth (more than 3 cloths)? 1 2 8 A high fever and foul smelling vaginal discharge? 1 2 8 Convulsions with loss of consciousness? 1 2 8 Any other complications? IF YES, SPECIFY 1 2 8 (SPECIFY)
413	Was (NAME) born on time or prematurely?	ON TIME.....1 PREMATURELY.....2 DON'T KNOW.....8	ON TIME.....1 PREMATURELY.....2 DON'T KNOW.....8	ON TIME.....1 PREMATURELY.....2 DON'T KNOW.....8
414	Was (NAME) delivered by caesarian section?	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2
415	When (NAME) was born, was he/she:  very large, larger than average, average, smaller than average, or very small?	VERY LARGE.....1 LARGER THAN AVERAGE.....2 AVERAGE.....3 SMALLER THAN AVERAGE.....4 VERY SMALL.....5 DON'T KNOW.....8	VERY LARGE.....1 LARGER THAN AVERAGE.....2 AVERAGE.....3 SMALLER THAN AVERAGE.....4 VERY SMALL.....5 DON'T KNOW.....8	VERY LARGE.....1 LARGER THAN AVERAGE.....2 AVERAGE.....3 SMALLER THAN AVERAGE.....4 VERY SMALL.....5 DON'T KNOW.....8
416	Was (NAME) weighed at birth?	YES.....1 NO.....2 (SKIP TO 418)←	YES.....1 NO.....2 (SKIP TO 419)←	YES.....1 NO.....2 (SKIP TO 419)←



		LAST BIRTH NAME _____	SECOND-FROM-LAST-BIRTH NAME _____	NEXT-TO-LAST-BIRTH NAME _____
417	How much did (NAME) weigh? RECORD WEIGHT FROM HEALTH CARD, IF AVAILABLE	GRAMS FROM CARD.....1 <input type="text"/> <input type="text"/> <input type="text"/> GRAMS FROM RECALL.....2 <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW.....9998	GRAMS FROM CARD.....1 <input type="text"/> <input type="text"/> <input type="text"/> GRAMS FROM RECALL.....2 <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW.....9998	GRAMS FROM CARD.....1 <input type="text"/> <input type="text"/> <input type="text"/> GRAMS FROM RECALL.....2 <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW.....9998
418	Did your period return since the birth of (NAME)?	YES .....1 (SKIP TO 420)← NO.....2 (SKIP TO 421)←		
419	Did your period return between the birth of (NAME) and the next pregnancy?		YES .....1 NO.....2 (SKIP TO 423)←	YES .....1 NO.....2 (SKIP TO 423)←
420	For how many months after the birth of (NAME) did you not have a period?	MONTH..... <input type="text"/> <input type="text"/> DON'T KNOW.....98	MONTH..... <input type="text"/> <input type="text"/> DON'T KNOW.....98	MONTH..... <input type="text"/> <input type="text"/> DON'T KNOW.....98
421	CHECK 226: RESPONDENT PREGNANT?	NOT PREGNANT <input type="checkbox"/> PREGNANT OR UNSURE <input type="checkbox"/> (SKIP TO 423)		
422	Have you resumed sexual relations since the birth of (NAME)?	YES.....1 NO.....2 (SKIP TO 424)←		
423	For how many months after the birth of (NAME) did you not have sexual relations?	MONTHS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98	MONTHS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98	MONTHS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98
424	Did you ever breastfeed (NAME)?	YES.....1 (SKIP TO 426)← NO.....2	YES.....1 (SKIP TO 426)← NO.....2	YES.....1 (SKIP TO 426)← NO.....2
424A RECORD 'N' IN COLUMN 4 OF CALENDER IN MONTH AFTER (NAME) BIRTH				
425	Why did you not breastfeed (NAME)?	CHILD DIED.....01 CHILD ILL/WEAK.....02 MOTHER ILL/WEAK.....03 NIPPLE/BREAST PROBLEM.....04 NO MILK.....05 MOTHER WORKING.....06 CHILD REFUSED.....07 KEEPING BREAST BEAUTIFUL.....08 OTHER.....96 (SPECIFY) (SKIP TO 428D) ←	CHILD DIED.....01 CHILD ILL/WEAK.....02 MOTHER ILL/WEAK.....03 NIPPLE/BREAST PROBLEM.....04 NO MILK.....05 MOTHER WORKING.....06 CHILD REFUSED.....07 KEEPING BREAST BEAUTIFUL.....08 OTHER.....96 (SPECIFY) (SKIP TO 428D) ←	CHILD DIED.....01 CHILD ILL/WEAK.....02 MOTHER ILL/WEAK.....03 NIPPLE/BREAST PROBLEM.....04 NO MILK.....05 MOTHER WORKING.....06 CHILD REFUSED.....07 KEEPING BREAST BEAUTIFUL.....08 OTHER.....96 (SPECIFY) (SKIP TO 428D) ←
426	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00'. IF LESS THAN 24 HOURS, RECORD HOURS. OTHERWISE RECORD DAYS.	HOURS.....1 <input type="text"/> <input type="text"/> DAYS.....2 <input type="text"/> <input type="text"/>	HOURS.....1 <input type="text"/> <input type="text"/> DAYS.....2 <input type="text"/> <input type="text"/>	HOURS.....1 <input type="text"/> <input type="text"/> DAYS.....2 <input type="text"/> <input type="text"/>
427	CHECK 402C: CHILD ALIVE?	ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/> (SKIP TO 428B)	ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/> (SKIP TO 428B)	ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/> (SKIP TO 428B)
428	Are you still breast- feeding (NAME)?	YES.....1 NO.....2 (SKIP TO 428B)←		
428A RECORD 'X' IN COLUMN 4 OF CALENDER IN MONTH AFTER (NAME) BIRTH AND EVERY MONTH UNTIL MONTH OF INTERVIEW→(SKIP TO 429)				
428B	How many months did you breast- feed (NAME)?	MONTHS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98	MONTHS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98	MONTHS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98



		LAST BIRTH	SECOND-FROM-LAST-BIRTH	NEXT-TO-LAST-BIRTH																																																																																																																														
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428B1 ENTER "X" IN COL.4 OF CALENDAR IN MONTH AFTER BIRTH AND IN EACH MONTH OF BREASTFEEDING																																																																																																																																		
428C	Why did you stop breastfeeding (NAME)?	CHILD DIED.....01 CHILD ILL/WEAK.....02 MOTHER ILL/WEAK.....03 NIPPLE/BREAST PROBLEM...04 NO MILK.....05 CHILD REFUSED.....06 BECAME PREGNANT.....07 MOTHER WORKING.....08 WEANING AGE.....09 START USING CONTRACEPTION.....10 OTHER.....96 (SPECIFY)	CHILD DIED.....01 CHILD ILL/WEAK.....02 MOTHER ILL/WEAK.....03 NIPPLE/BREAST PROBLEM...04 NO MILK.....05 CHILD REFUSED.....06 BECAME PREGNANT.....07 MOTHER WORKING.....08 WEANING AGE.....09 START USING CONTRACEPTION.....10 OTHER.....96 (SPECIFY)	CHILD DIED.....01 CHILD ILL/WEAK.....02 MOTHER ILL/WEAK.....03 NIPPLE/BREAST PROBLEM...04 NO MILK.....05 CHILD REFUSED.....06 BECAME PREGNANT.....07 MOTHER WORKING.....08 WEANING AGE.....09 START USING CONTRACEPTION.....10 OTHER.....96 (SPECIFY)																																																																																																																														
428D	CHECK 402C:  CHILD ALIVE?	ALIVE <input type="checkbox"/> (SKIP TO 430A) MENINGGAL <input type="checkbox"/> (GO TO 403 FOR NEXT BIRTH, IF NO MORE BIRTHS GO TO FIRST COLUMN OF 441)																																																																																																																																
429	How many times did you breastfeed last night between sundown and sunup?  (IF ANSWER IS NOT NUMERIC, PROBE FOR AN APPROXIMATE NO.)	NUMBER OF NIGHTTIME FEEDINGS <span style="border: 1px solid black; padding: 0 10px;">  </span>																																																																																																																																
430	How many times did you breastfeed yesterday during the daylight hours?  (IF ANSWER IS NOT NUMERIC, PROBE FOR AN APPROXIMATE NO.)	NUMBER OF DAYLIGHT FEEDINGS <span style="border: 1px solid black; padding: 0 10px;">  </span>																																																																																																																																
430A	Was (NAME) given a pacifier yesterday or last night?	YES.....1 NO.....2 DON'T KNOW.....8																																																																																																																																
430B	Did (NAME) drink anything from a nipple yesterday or last night?	YES.....1 NO.....2 DON'T KNOW.....8																																																																																																																																
431	At any time yesterday or last night was (NAME) given any of the following:	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">YES</th> <th style="text-align: center;">NO</th> </tr> </thead> <tbody> <tr><td>Plain water?</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr><td>Sugar water?</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr><td>Fruit juice (papaya/banana/orange/tomato)?</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr><td>Honey/diluted honey?</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr><td>Tea?</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr><td>Fresh milk?</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr><td>Sweetened condensed milk?</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr><td>Powdered milk?</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr><td>Rice water/other liquid?</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr><td>Mushy/solid food/porridge?</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr><td>Fish/egg/liver?</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr><td>Meat?</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr><td>Any other foods?</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> </tbody> </table>		YES	NO	Plain water?	1	2	Sugar water?	1	2	Fruit juice (papaya/banana/orange/tomato)?	1	2	Honey/diluted honey?	1	2	Tea?	1	2	Fresh milk?	1	2	Sweetened condensed milk?	1	2	Powdered milk?	1	2	Rice water/other liquid?	1	2	Mushy/solid food/porridge?	1	2	Fish/egg/liver?	1	2	Meat?	1	2	Any other foods?	1	2	<table style="width: 100%; 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		LAST BIRTH NAME _____	SECOND-FROM-LAST-BIRTH NAME _____	NEXT-TO-LAST-BIRTH NAME _____
432	CHECK 431:  FOOD OR LIQUID GIVEN YESTERDAY?	AT LEAST ONE "YES" <input type="checkbox"/> ↓ (SKIP TO 435)	NONE <input type="checkbox"/> ↓ (SKIP TO 435)	AT LEAST ONE "YES" <input type="checkbox"/> ↓ (SKIP TO 435)
433	CHECK 428:  STILL BREASTFEEDING?	YES <input type="checkbox"/> ↓ (SKIP TO 436)	NO OR NO PROBE <input type="checkbox"/> ↓ (SKIP TO 436)	YES <input type="checkbox"/> ↓ (SKIP TO 436)
434	Was (NAME) ever given any water, or something else to drink or eat (other than breastmilk) yesterday or last night?	YES.....1 NO.....2 (SKIP TO 436)←	YES.....1 NO.....2 (SKIP TO 436)←	YES.....1 NO.....2 (SKIP TO 436)←
435	(Beside given breastmilk), How many times (NAME) was given any food including any mushy/solid food yesterday?	TIMES..... <input type="checkbox"/> DON'T KNOW.....8	TIMES..... <input type="checkbox"/> DON'T KNOW.....8	TIMES..... <input type="checkbox"/> DON'T KNOW.....8
436	On how many days during the last week was (NAME) given any of the following:	RECORD THE NUMBER OF DAYS  Plain water? PLAIN WATER <input type="checkbox"/> Sugar water? SUGAR WATER <input type="checkbox"/> Fruit juice? FRUIT JUICE <input type="checkbox"/> Honey? HONEY <input type="checkbox"/> Tea? TEA <input type="checkbox"/> Fresh milk? FRESH MILK <input type="checkbox"/> Sweetened condensed milk? SWEETENED CONDENSED MILK <input type="checkbox"/> Powdered milk? POWDERED MILK <input type="checkbox"/> Rice water or other liquid? RICE WATER/OTHER LIQ. <input type="checkbox"/> Mashed/solid food/porridge? MASHED/SOLID FOOD/PORRIDGE <input type="checkbox"/> Fish/egg/liver? FISH/EGG/LIVER <input type="checkbox"/> Meat? MEAT <input type="checkbox"/> Any other foods? ANY OTHER FOODS <input type="checkbox"/> IF DON'T KNOW, RECORD '8'	RECORD THE NUMBER OF DAYS  PLAIN WATER <input type="checkbox"/> SUGAR WATER <input type="checkbox"/> FRUIT JUICE <input type="checkbox"/> HONEY <input type="checkbox"/> TEA <input type="checkbox"/> FRESH MILK <input type="checkbox"/> SWEETENED CONDENSED MILK <input type="checkbox"/> POWDERED MILK <input type="checkbox"/> RICE WATER/OTHER LIQ. <input type="checkbox"/> MASHED/SOLID FOOD/PORRIDGE <input type="checkbox"/> FISH/EGG/LIVER <input type="checkbox"/> MEAT <input type="checkbox"/> ANY OTHER FOODS <input type="checkbox"/>	RECORD THE NUMBER OF DAYS  PLAIN WATER <input type="checkbox"/> SUGAR WATER <input type="checkbox"/> FRUIT JUICE <input type="checkbox"/> HONEY <input type="checkbox"/> TEA <input type="checkbox"/> FRESH MILK <input type="checkbox"/> SWEETENED CONDENSED MILK <input type="checkbox"/> POWDERED MILK <input type="checkbox"/> RICE WATER/OTHER LIQ. <input type="checkbox"/> MASHED/SOLID FOOD/PORRIDGE <input type="checkbox"/> FISH/EGG/LIVER <input type="checkbox"/> MEAT <input type="checkbox"/> ANY OTHER FOODS <input type="checkbox"/>
440	GO BACK TO 403 FOR NEXT BIRTH; OR, IF NO MORE BIRTHS GO TO COLUMN (1) OF 441			

# SECTION 4B. IMMUNIZATION AND HEALTH

441 ENTER THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH SINCE JANUARY 1992 IN THE TABLE.  
ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. IF THERE ARE MORE THAN 3 BIRTHS,  
USE ADDITIONAL FORMS.

LINE NUMBER FROM Q. 212	LINE NUMBER.....	LINE NUMBER.....	LINE NUMBER.....
FROM P.212 AND P.216	<b>LAST BIRTH</b> NAME ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/> (GO TO 442 FOR NEXT BIRTH, IF NO MORE BIRTHS, GO TO 481)	<b>SECOND-FROM-LAST-BIRTH</b> NAME ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/> (GO TO 442 FOR NEXT BIRTH, IF NO MORE BIRTHS, GO TO 481)	<b>NEXT-TO-LAST-BIRTH</b> NAME ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/> (GO TO 442 FOR NEXT BIRTH, IF NO MORE BIRTHS, GO TO 481)
442 Do you have a card where (NAME'S) vaccinations are written down?  IF YES: May I see it, please?	YES, SEEN.....1 (SKIP TO 443B)<..... YES, NOT SEEN.....2 (SKIP TO 447)<..... NO CARD.....3	YES, SEEN.....1 (SKIP TO 443B)<..... YES, NOT SEEN.....2 (SKIP TO 447)<..... NO CARD.....3	YES, SEEN.....1 (SKIP TO 443B)<..... YES, NOT SEEN.....2 (SKIP TO 447)<..... NO CARD.....3
443 Did you ever have a vaccination card for (NAME)?	YES.....1 (SKIP TO 447)<..... NO.....2	YES.....1 (SKIP TO 447)<..... NO.....2	YES.....1 (SKIP TO 447)<..... NO.....2
443B FROM THE CARD, RECORD THE NUMBER OF TIMES VITAMIN-A WAS GIVEN	NUMBER OF TIMES VITAMIN-A RECORDED IN THE CARD <input type="checkbox"/>	NUMBER OF TIMES VITAMIN-A RECORDED IN THE CARD <input type="checkbox"/>	NUMBER OF TIMES VITAMIN-A RECORDED IN THE CARD <input type="checkbox"/>

	IMMUNIZATION PLACE	IMMUNIZATION PLACE	IMMUNIZATION PLACE																																																																																																																																				
444 (1) COPY VACCINATION DATES FOR EACH VACCINE FROM THE CARD.  (2) WRITE '44' IN 'DAY' COLUMN, IF CARD SHOWS THAT A VACCINATION WAS GIVEN, BUT NO DATE RECORDED.	GOVERNMENT HOSPITAL.....11 HEALTH CENTER.....12 DELIVERY POST.....13 HEALTH POST.....14 PRIVATE HOSPITAL.....21 PRIVATE CLINIC.....22 PRIVATE DOCTOR.....23 PRIVATE MIDWIFE.....24 OTHER.....96 (SPECIFY)	GOVERNMENT HOSPITAL.....11 HEALTH CENTER.....12 DELIVERY POST.....13 HEALTH POST.....14 PRIVATE HOSPITAL.....21 PRIVATE CLINIC.....22 PRIVATE DOCTOR.....23 PRIVATE MIDWIFE.....24 OTHER.....96 (SPECIFY)	GOVERNMENT HOSPITAL.....11 HEALTH CENTER.....12 DELIVERY POST.....13 HEALTH POST.....14 PRIVATE HOSPITAL.....21 PRIVATE CLINIC.....22 PRIVATE DOCTOR.....23 PRIVATE MIDWIFE.....24 OTHER.....96 (SPECIFY)																																																																																																																																				
BCG POLIO 0 (at birth) POLIO 1 POLIO 2 POLIO 3 DPT 1 DPT 2 DPT 3 MEASLES	<table border="1"> <thead> <tr> <th>DAY</th> <th>MON</th> <th>YEAR</th> <th>IMMUN. PLACE</th> </tr> </thead> <tbody> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> </tbody> </table>	DAY	MON	YEAR	IMMUN. PLACE																																									<table border="1"> <thead> <tr> <th>DAY</th> <th>MON</th> <th>YEAR</th> <th>IMMUN. PLACE</th> </tr> </thead> <tbody> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> </tbody> </table>	DAY	MON	YEAR	IMMUN. PLACE																																									<table border="1"> <thead> <tr> <th>DAY</th> <th>MON</th> <th>YEAR</th> <th>IMMUN. PLACE</th> </tr> </thead> <tbody> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td></tr> </tbody> </table>	DAY	MON	YEAR	IMMUN. PLACE																																								
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445 Has (NAME) received any vaccinations that are not recorded on this card?  RECORD 'YES' IF RESPONDENT MENTIONS BCG, DPT 1-3, POLIO 0-3, AND/OR MEASLES	YES.....1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING 'DAY' COLUMN IN 444)<..... NO.....2 DON'T KNOW.....8 (SKIP TO 451)<.....	YES.....1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING 'DAY' COLUMN IN 444)<..... NO.....2 DON'T KNOW.....8 (SKIP TO 451)<.....	YES.....1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING 'DAY' COLUMN IN 444)<..... NO.....2 DON'T KNOW.....8 (SKIP TO 451)<.....																																																																																																																																				



		LAST BIRTH NAME _____	SECOND-FROM-LAST-BIRTH NAME _____	NEXT-TO-LAST-BIRTH NAME _____
447	Please tell me if (NAME) (has) received any of the following vaccinations:			
	A BCG vaccination against tuberculosis, that is, an injection in the upper arm that left a scar?	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
	Polio vaccine, that is, pink or white drops in the mouth?	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
	IF YES: How many times?	TIMES..... <input type="text"/>	TIMES..... <input type="text"/>	TIMES..... <input type="text"/>
	DPT vaccination, that is, an injection, usually given at the same time as polio drops?	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
	IF YES: How many times?	TIMES..... <input type="text"/>	TIMES..... <input type="text"/>	TIMES..... <input type="text"/>
	An injection against measles?	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
451	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
451A	Has (NAME) been ill with a cough at any time in the last 2 weeks?	YES.....1 NO.....2 (SKIP TO 454A) <----- DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 454A) <----- DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 454A) <----- DON'T KNOW.....8
451B	Did the cough begin within the last 2 weeks?	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
454	When (NAME) was ill with a cough, did he/she breathe faster than usual with short, rapid breaths?	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
454A	CHECK 451 AND 451A: FEVER OR COUGH?	"YES" IN EITHER IN 451 OR 451A <input type="checkbox"/> <input type="checkbox"/> OTHER V >(SKIP TO 460)	"YES" IN EITHER IN 451 OR 451A <input type="checkbox"/> <input type="checkbox"/> OTHER V >(SKIP TO 460)	"YES" IN EITHER IN 451 OR 451A <input type="checkbox"/> <input type="checkbox"/> OTHER V >(SKIP TO 460)
458	Did you seek advice or treatment for the fever/cough?	YES.....1 NO.....2 (SKIP TO 459A) <-----	YES.....1 NO.....2 (SKIP TO 459A) <-----	YES.....1 NO.....2 (SKIP TO 459A) <-----
459	Where did you seek advice or medicine treatment for (NAME)?  Anyone else? (CIRCLE EACH MENTIONED)	<u>GOVERNMENT</u> HOSPITAL.....A HEALTH CENTER.....B  <u>PRIVATE</u> HOSPITAL.....C CLINIC.....D DOCTOR.....E NURSE/MIDWIFE.....F  <u>OTHER PRIVATE SECTOR</u> DELIVERY POST.....G HEALTH POST.....H HEALTH CADRE.....I TRADITIONAL HEALER.....J PHARMACY/DRUGSTORE.....K SHOP.....L OTHER.....X (SPECIFY)	<u>GOVERNMENT</u> HOSPITAL.....A HEALTH CENTER.....B  <u>PRIVATE</u> HOSPITAL.....C CLINIC.....D DOCTOR.....E NURSE/MIDWIFE.....F  <u>OTHER PRIVATE SECTOR</u> DELIVERY POST.....G HEALTH POST.....H HEALTH CADRE.....I TRADITIONAL HEALER.....J PHARMACY/DRUGSTORE.....K SHOP.....L OTHER.....X (SPECIFY)	<u>GOVERNMENT</u> HOSPITAL.....A HEALTH CENTER.....B  <u>PRIVATE</u> HOSPITAL.....C CLINIC.....D DOCTOR.....E NURSE/MIDWIFE.....F  <u>OTHER PRIVATE SECTOR</u> DELIVERY POST.....G HEALTH POST.....H HEALTH CADRE.....I TRADITIONAL HEALER.....J PHARMACY/DRUGSTORE.....K SHOP.....L OTHER.....X (SPECIFY)
459A	How long has (NAME) been ill with a fever/cough?	DAYS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98 (IF LESS THAN ONE DAY WRITE "00")	DAYS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98 (IF LESS THAN ONE DAY WRITE "00")	DAYS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98 (IF LESS THAN ONE DAY WRITE "00")

	LAST BIRTH	SECOND-FROM-LAST-BIRTH	NEXT-TO-LAST-BIRTH
	NAME _____	NAME _____	NAME _____
460	Has (NAME) had diarrhea in the last two weeks? YES.....1 NO.....2 DON'T KNOW.....8 SKIP TO 479 <	YES.....1 NO.....2 DON'T KNOW.....8 SKIP TO 479 <	YES.....1 NO.....2 DON'T KNOW.....8 SKIP TO 479 <
460A	How long did (NAME) have the diarrhea? DAYS..... (IF LESS THAN ONE DAY WRITE "00")	DAYS..... (IF LESS THAN ONE DAY WRITE "00")	DAYS..... (IF LESS THAN ONE DAY WRITE "00")
464	Was there any blood in the stools? YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
464A	On the worst day of the diarrhea, how many bowel movements did (NAME) have? NUMBER OF BOWEL MOVEMENTS..... TOO MANY.....96 DON'T KNOW.....98	NUMBER OF BOWEL MOVEMENTS..... TOO MANY.....96 DON'T KNOW.....98	NUMBER OF BOWEL MOVEMENTS..... TOO MANY.....96 DON'T KNOW.....98
465	Did (NAME) has diarrhea in the last 24 hours? YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
467	CHECK 428: LAST CHILD STILL BREASTFED? YES <input type="checkbox"/> NO <input type="checkbox"/> V (SKIP TO 468)		
467A	During (NAME)'s diarrhea, did you change the frequency of breastfeeding? YES.....1 NO.....2 (SKIP KE 468) <		
467B	Did you <u>reduce</u> the number of feeds or <u>increase</u> them, or did you <u>stop completely</u> ? REDUCED.....1 INCREASED.....2 STOPPED COMPLETELY.....3		
468	(Aside from breastmilk) Was he/she given <u>less</u> amount to drink as before the diarrhea, or <u>same</u> , or <u>more</u> ? LESS.....1 SAME.....2 MORE.....3 DON'T KNOW.....8	LESS.....1 SAME.....2 MORE.....3 DON'T KNOW.....8	LESS.....1 SAME.....2 MORE.....3 DON'T KNOW.....8
468A	Was he/she given <u>less</u> amount of food to eat as before the diarrhea, or <u>same</u> , or <u>more</u> ? LESS.....1 SAME.....2 MORE.....3 DON'T KNOW.....8	LESS.....1 SAME.....2 MORE.....3 DON'T KNOW.....8	LESS.....1 SAME.....2 MORE.....3 DON'T KNOW.....8
468A1	Was (NAME) given a fluid made from a packet called ORALIT? YES.....1 NO.....2 DON'T KNOW.....8 (SKIP TO 469) <	YES.....1 NO.....2 DON'T KNOW.....8 (SKIP TO 469) <	YES.....1 NO.....2 DON'T KNOW.....8 (SKIP TO 469) <
468B	How many packages of ORALIT was (NAME) given during diarrhea? PACKAGES..... DON'T KNOW.....98	PACKAGES..... DON'T KNOW.....98	PACKAGES..... DON'T KNOW.....98
469	Was anything given for the diarrhea (other than ORALIT)? YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
471	Did you seek advice or treatment for the diarrhea for (NAME)? YES.....1 NO.....2 (SKIP TO 479) <	YES.....1 NO.....2 (SKIP TO 479) <	YES.....1 NO.....2 (SKIP TO 479) <
472	Where did you seek advice or treatment for (NAME)? Any other place? (CIRCLE EACH MENTIONED)  GOVERNMENT HOSPITAL.....A HEALTH CENTER.....B  PRIVATE HOSPITAL.....C CLINIC.....D DOCTOR.....E NURSE/MIDWIFE.....F  OTHER PRIVATE SECTOR DELIVERY POST.....G HEALTH POST.....H HEALTH CADRE.....I TRADITIONAL HEALER.....J PHARMACY/DRUGSTORE.....K SHOP.....L OTHER.....X (SPECIFY)	GOVERNMENT HOSPITAL.....A HEALTH CENTER.....B  PRIVATE HOSPITAL.....C CLINIC.....D DOCTOR.....E NURSE/MIDWIFE.....F  OTHER PRIVATE SECTOR DELIVERY POST.....G HEALTH POST.....H HEALTH CADRE.....I TRADITIONAL HEALER.....J PHARMACY/DRUGSTORE.....K SHOP.....L OTHER.....X (SPECIFY)	GOVERNMENT HOSPITAL.....A HEALTH CENTER.....B  PRIVATE HOSPITAL.....C CLINIC.....D DOCTOR.....E NURSE/MIDWIFE.....F  OTHER PRIVATE SECTOR DELIVERY POST.....G HEALTH POST.....H HEALTH CADRE.....I TRADITIONAL HEALER.....J PHARMACY/DRUGSTORE.....K SHOP.....L OTHER.....X (SPECIFY)
479	GO BACK TO 442 FOR NEXT BIRTH; OR, IF NO MORE BIRTHS, GO TO 481		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
481	When a child has diarrhea, should he/she be given <u>less</u> to drink than usual, about the <u>same</u> amount, or <u>more</u> than usual?	LESS FLUIDS.....1 ABOUT THE SAME AMOUNT OF FLUIDS.2 MORE FLUIDS.....3 DON'T KNOW.....8	
482	When a child has diarrhea, should he/she be given <u>less</u> to eat than usual, about the <u>same</u> amount, or <u>more</u> than usual?	LESS FLUIDS.....1 ABOUT THE SAME AMOUNT OF FLUIDS.2 MORE FLUIDS.....3 DON'T KNOW.....8	
483	When a child is sick with <u>diarrhea</u> , what signs of illness would tell you that he/she should be taken to a health facility?  RECORD ALL MENTIONED.	MANY WATERY STOOLS.....A REPEATED VOMITING.....B BLOOD IN STOOLS.....C FEVER.....D MARKED THIRST.....E NOT EATING/NOT DRINKING WELL...F GETTING SICKER/VERY SICK.....G NOT GETTING BETTER.....H OTHER.....X (SPECIFY) DON'T KNOW.....Z	
484	When a child is sick with <u>cough</u> , what signs of illness would tell you that he/she should be taken to a health facility?  RECORD ALL MENTIONED.	FAST BREATHING.....A DIFFICULT BREATHING.....B NOISY BREATHING.....C FEVER.....D UNABLE TO DRINK.....E NOT EATING/NOT DRINKING WELL...F GETTING SICKER/VERY SICK.....G NOT GETTING BETTER.....H OTHER.....X (SPECIFY) DON'T KNOW.....Z	
485	CHECK 468A1:  NO CHILD RECIEVED ORALIT OR 468A1 <input type="checkbox"/> NOT ASKED	ANY CHILD RECIEVED ORALIT IN 468A1 <input type="checkbox"/>	→485C
485A	Before this interview, have you ever heard of a special product called ORALIT you can get for the treatment of diarrhea?	YES.....1 NO.....2	→485C
485B	Have you ever seen a packet like this before? (SHOW PACKAGE)	YES.....1 NO.....2	→501
485C	Have you ever prepared a solution with one of these packets to treat diarrhea in yourself or someone else? (SHOW PACKAGE)	YES.....1 NO.....2	→501
485D	Where did you get the water you used to prepare ORALIT?	PIPED INTO RESIDENCE.....11 PIPED INTO YARD OT PLOT.....12 PUBLIC TAP.....13 PUMP.....21 PROTECTED WELL.....22 UNPROTECTED WELL.....23 PROTECTED SPRING.....31 UNPROTECTED SPRING.....32 RIVER.....33 RAINWATER.....41 OTHER.....96 (SPECIFY)	
485E	Did you boil the water?	YES.....1 NO.....2 DON'T KNOW.....8	
485F	Where can you usually get the ORALIT packet?	GOVERNMENT HOSPITAL.....11 HEALTH CENTER.....12  PRIVATE HOSPITAL.....21 CLINIC.....22 DOCTOR.....23 NURSE/MIDWIFE.....24  OTHER PRIVATE SECTOR DELIVERY POST.....31 HEALTH POST.....32 HEALTH CADRE.....33 TRADITIONAL HEALER.....34 PHARMACY/DRUGSTORE.....35 SHOP.....36 OTHER.....96 (SPECIFY)	
485G	Is it easy or difficult to get to (PLACE IN 485F)?	EASY.....1 DIFFICULT.....2 DON'T KNOW.....8	
485H	Is ORALIT <u>always</u> available, <u>sometimes</u> available, or <u>never</u> available in (PLACE IN 485F)?	ALWAYS.....1 SOMETIMES.....2 DON'T KNOW.....8	



# SECTION 5. MARRIAGE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO															
501	Have you been married only once, or more than once?	ONCE.....1 MORE THAN ONCE.....2	→502															
501A	What was the main reason you have been married more than once?	HUSBAND DIED.....1 UNHARMONY.....2 LONG SEPARATION.....3 NO CHILDREN.....4 OTHER.....6 (SPECIFY)																
502	In what month and year did you and your (first) husband married?	MONTH..... DON'T KNOW MONTH.....98 YEAR..... DON'T KNOW YEAR.....9998																
503	How old were you when you (first) married?	AGE (YEAR)..... DON'T KNOW AGE.....98																
503A	How old were you when you first had sexual intercourse?	AGE..... WHEN MARRIED .....96 DON'T KNOW AGE.....98																
503B	How old was your husband when he first married?	AGE (YEAR)..... DON'T KNOW AGE.....98																
503C	Have you received Tetanus Toxoid injection (TT) before marriage?	YES.....1 NO.....2	→504															
503D	IF YES, How many injection have you received?	NUMBER OF INJECTIONS..... DON'T KNOW YEAR.....98																
504	<p>DETERMINE MONTHS MARRIED SINCE JANUARY 1992. ENTER "X" IN COLUMN 3 OF CALENDAR FOR EACH MONTH MARRIED, AND ENTER "0" FOR EACH MONTH NOT MARRIED, SINCE JANUARY 1992.</p> <p>FOR WOMEN NOT CURRENTLY MARRIED OR WITH MORE THAN ONE MARRIAGE: PROBE FOR DATES COUPLE TERMINATED THEIR MARRIAGE OR DATES WIDOWED, AND FOR STARTING DATE OF ANY SUBSEQUENT MARRIAGE.</p>																	
505	CHECK 106A: CURRENTLY MARRIED <input type="checkbox"/> DIVORCED/ WIDOWED <input type="checkbox"/>		→511															
506	Now I need some details about your sexual activity in order to get a better understanding of family planning and fertility.  When was the last time you had sexual intercourse?	NEVER.....000 DAYS AGO.....1 WEEKS AGO.....2 MONTHS AGO.....3 YEARS AGO.....4 BEFORE LAST BIRTH.....996	→511															
509	How many times did you have sexual intercourse in the last month?	TIMES.....																
510	CHECK 309 AND 310: NOT PREGNANT AND NOT STERILIZED <input type="checkbox"/> PREGNANT OR STERILIZED <input type="checkbox"/>		→511															
510A	Did you and your husband use a method of contraception the last time you had sexual intercourse?	YES.....1 NO.....2																
510B	If you became pregnant in the next few weeks, would you be <u>happy</u> , <u>unhappy</u> , or would it <u>not matter</u> very much?	HAPPY.....1 UNHAPPY.....2 NOT MATTER.....3																
511	PRESENCE OF OTHERS AT THIS POINT.	<table border="1"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>CHILDREN UNDER 10.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>HUSBAND.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>OTHER MALES.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>OTHER FEMALES.....</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	CHILDREN UNDER 10.....	1	2	HUSBAND.....	1	2	OTHER MALES.....	1	2	OTHER FEMALES.....	1	2	
	YES	NO																
CHILDREN UNDER 10.....	1	2																
HUSBAND.....	1	2																
OTHER MALES.....	1	2																
OTHER FEMALES.....	1	2																

# SECTION 6. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
601	CHECK 106A: CURRENTLY MARRIED <input type="checkbox"/> V DIVORCED/ WIDOWED <input type="checkbox"/>		608
602	CHECK 312 AND 312A: HUSBAND OR RESPONDENT NOT STERILIZED <input type="checkbox"/> V HUSBAND OR RESPONDENT STERILIZED <input type="checkbox"/>		608
603	CHECK 226:  NOT PREGNANT/ UNSURE <input type="checkbox"/> V Now I have some questions about the future. Would you like to have (a/another) child or would you prefer not to have any (more) children?  PREGNANT <input type="checkbox"/> V Now I have some questions about the future. After the child you are expecting, would you like to have another child or would you prefer not to have any more children?	HAVE A (ANOTHER) CHILD.....1 NO MORE/NONE.....2 SAYS SHE CAN'T GET PREGNANT.....3 UNDECIDED OR DON'T KNOW.....8	607 608
605	What is the main reason you want (more) children?	NOT ENOUGH CHILDREN.....1 HAVE NO SON/DAUGHTER.....2 CUSTOM OR RELIGION.....3 HUSBAND RECOMMENDED.....4 ECONOMIC FAMILY.....5 OTHER _____ 6 (SPECIFY)	
606	CHECK 226:  NOT PREGNANT/ UNSURE <input type="checkbox"/> V How long would you like to wait from now before the birth of (a/another) child?  PREGNANT <input type="checkbox"/> V How long would you like to wait after the birth of the child you are expecting before the birth of another child?	WAITING TIME MONTHS.....1 YEARS.....2 SOON/NOW.....993 CAN'T GET PREGNANT.....994 OTHER _____ 996 (SPECIFY) DON'T KNOW.....998	608
607	What is the main reason you don't want anymore child?	HAVE ENOUGH CHILDREN.....01 TOO OLD.....02 HEALTH.....03 UNABLE TO SUPPORT.....04 GOVERNMENT RECOMMENDED.....05 TOO BUSY.....06 OTHER _____ 96 (SPECIFY)	
608	CHECK 216:  HAS LIVING CHILDREN <input type="checkbox"/> V If you could go back to the time when you just married and have no children and could choose exactly the number of children to have in your whole life, how many would that be?  NO LIVING CHILDREN <input type="checkbox"/> V If you could choose exactly the number of children to have in your whole life, how many would that be?  PROBE FOR A NUMERIC RESPONSE, THEN RECORD NUMERIC RESPONSE OR OTHER ANSWER	TOTAL NUMBER OF CHILDREN..... UP TO GOD.....95 OTHER _____ 96 (SPECIFY)	





SECTION 7. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
701	ASK QUESTIONS ABOUT CURRENT OR MOST RECENT HUSBAND		
702	Did your (last) husband ever attend school?	YES.....1 NO.....2	→705
703	What was the highest level of school he attended: elementary, junior, senior high school, academy or university?	ELEMENTARY SCHOOL.....1 JUNIOR HIGH SCHOOL.....2 SENIOR HIGH SCHOOL.....3 ACADEMY.....4 UNIVERSITY.....5 DON'T KNOW.....8	→705
704	What was the highest grade he completed at that level?  COMPLETED = 7	GRADE..... <input type="checkbox"/> DON'T KNOW.....8	
705	(Does/did) your husband work?	YES.....1 NO.....2	→709
705A	(Does/did) your husband work in the agriculture?	YES.....1 NO.....2	→705C
705B	(Does/did) your husband work mainly in his own land, or (does/did) he rent land, or (does/did) he work on someone else's land?	HIS LAND.....1 RENTED LAND.....2 SOMEONE ELSE'S LAND.....3 OTHER.....6 (SPECIFY)	
705C	What kind of work does (did) your (last) husband mainly do? (DESCRIBE AS COMPLETE AS POSSIBLE, AND DO NOT CIRCLE) _____ _____ _____	PROFESSIONAL, TECHNICAL.....01 MANAGERS AND ADMINISTRATORS.....02 CLERICAL.....03 SALES.....04 SERVICE.....05 AGRICULTURAL WORKER.....06 INDUSTRIAL WORKER.....07 OTHER.....96 (SPECIFY) DON'T KNOW.....98	
705D	(Does/did) your (last) husband work as a laborer/staff, officer, or a member of the armed forces?	LABORER/STAFF.....1 OFFICER.....2 MEMBER OF ARMED FORCES.....3 OTHER.....6 (SPECIFY)	
709	As you know, many women work - I mean aside from doing their own housework. Some work in a shop, or in a business, or work for the government. Some women are paid in cash or in kind for their work; others are not paid.  In the past 12 months have you done any of these things or any other work?	YES.....1 NO.....2	→717
710	Did/do you work in agriculture or not in agriculture?	YES.....1 NO.....2	→710B
710A	Did/do you work mainly on your own land, or on rented land, or on someone else's land?	OWN LAND.....1 RENTED LAND.....2 SOMEONE ELSE'S LAND.....3 OTHER.....6 (SPECIFY)	
710B	What (is/was) your (most recent) occupation? That is, what kind of work (do/did) you mainly do? DESCRIBE AS COMPLETE AS POSSIBLE, AND DO NOT CIRCLE CODE _____ _____	PROFESSIONAL, TECHNICAL.....01 MANAGERS AND ADMINISTRATORS.....02 CLERICAL.....03 SALES.....04 SERVICE.....05 AGRICULTURAL WORKER.....06 INDUSTRIAL WORKER.....07 OTHER.....96 (SPECIFY) DON'T KNOW.....98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
710C	Did/do you work as a laborer/staff in a private company, as government employee, or a member of the armed forces?	LABORER/STAFF.....1 OFFICER.....2 MEMBER OF THE ARMED FORCES.....3 OTHER.....6 (SPECIFY)	
711	Did/do you work for a family member, for someone else, or are you self-employed?	FOR FAMILY MEMBER.....1 FOR SOMEONE ELSE.....2 SELF-EMPLOYED.....3	
712A	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR.....1 SEASONALLY/PART OF THE YEAR.....2 ONCE IN A WHILE.....3	
712B	CHECK 106A:  <div style="display: flex; justify-content: space-around;"> <div> <p>CURRENTLY MARRIED <input type="checkbox"/></p> <p>↓</p> <p>Who mainly decides how the money you earn will be used: you, your husband, you and your husband jointly, someone else, or you and someone else?</p> </div> <div> <p>DIVORCED/ WIDOWED <input type="checkbox"/></p> <p>↓</p> <p>Who mainly decides how the money you earn will be used: you, someone else, or you and someone else jointly?</p> </div> </div>	RESPONDENT DECIDES.....1 HUSBAND DECIDES.....2 JOINTLY WITH HUSBAND.....3 SOMEONE ELSE DECIDES.....4 JOINTLY WITH SOMEONE ELSE.....5	
713	Do you usually work at home or away from home?	HOME.....1 AWAY.....2	→801
714	How long did you leave home for working?  RECORD TIME SINCE SHE LEFT HOME AFTER SHE ARRIVED AT HOME	LENGTH OF TIME... <input type="text"/> <input type="text"/> HOURS	
715	CHECK 217 AND 218: CHILD AGE LESS THAN 5 YEARS <input type="checkbox"/> ↓	NO CHILD <input type="checkbox"/>	→801
716	Who take care of (NAME OF LAST CHILD) when you are working?	RESPONDENT.....01 HUSBAND.....02 OLDER SISTER.....03 OLDER BROTHER.....04 FAMILY.....05 NEIGHBOR.....06 FRIEND.....07 SERVANT.....08 AT SCHOOL.....09 CHILD CARE.....10 HAS NOT WORKED SINCE LAST BIRTH.....11 OTHER.....96 (SPECIFY)	→801
717	Do you participate in social activities?	YES.....1 NO.....2	

# SECTION 8: AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
801	Have you ever heard of an illness called AIDS?	YES.....1 NO.....2	→901
802	From which sources of information have you learned about AIDS?  Any other sources?  RECORD ALL MENTIONED	RADIO.....A TELEVISION.....B NEWSPAPER/MAGAZINES.....C PAMPHLETS/POSTERS.....D HEALTH WORKERS.....E MOSQUES/CHURCHES.....F SCHOOL/TEACHERS.....G COMMUNITY MEETINGS.....H FRIENDS/RELATIVES.....I WORK PLACE.....J OTHER.....X (SPECIFY)	
803	Is there anything a person can do to avoid getting AIDS or the virus that causes AIDS?	YES.....1 NO.....2 DON'T KNOW.....8	→805
804	What can a person do to avoid getting AIDS or the virus that causes AIDS?  Any other ways?  RECORD ALL MENTIONED.	ABSTAIN FROM SEX.....B USE CONDOMS DURING SEX.....C HAVE ONLY ONE SEX PARTNER.....D AVOID SEX WITH PROSTITUTES.....E AVOID SEX WITH HOMOSEXUALS.....F AVOID BLOOD TRANSFUSIONS.....G AVOID INJECTIONS.....H AVOID KISSING.....I AVOID MOSQUITO BITES.....J SEEK PROTECTION FROM TRADITIONAL HEALER.....K OTHER.....X (SPECIFY) OTHER.....W (SPECIFY) DON'T KNOW.....Y	
805	Can a person who has AIDS be cured?	YES.....1 NO.....2 DON'T KNOW.....8	
806	Do you think your chances of getting AIDS are small, moderate, great, or no risk at all?	SMALL.....1 MODERATE.....2 GREAT.....3 NO RISK AT ALL.....4 DON'T KNOW.....8	
807	CHECK 106A:  CURRENTLY MARRIED <input type="checkbox"/> DIVORCED/WIDOWED <input type="checkbox"/>		→901
808	Since you heard of AIDS, have you changed your sexual behavior to prevent getting AIDS?	YES.....1 NO.....2 DON'T KNOW.....8	→901
809	What did you do?  Anything else?  RECORD ALL MENTIONED.	STOPPED ALL SEX.....B STARTED USING CONDOMS.....C RESTRICTED SEX TO SPOUSE.....D REDUCE SEX PARTNER.....E NO MORE HOMOSEXUAL CONTACT.....F OTHER.....X (SPECIFY)	



# SECTION 9. MATERNAL MORTALITY

901 Now I want to ask you some questions about your brothers and sisters, that is, the children who was born to your natural mother, including these who are living with you, those living elsewhere, and those who have died. How many children were born from your mother, including you?

NUMBER OF BIRTH  
TO NATURAL MOTHER

IF ANSWER '01'  
OR ONLY CHILD

☐

→ 915

902 Of all the births, how many sisters and brothers are older than you?

NUMBER OF OLDER BROTHERS AND SISTERS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
903 What was the name given to your oldest (next oldest) brother or sister?							
904 Is (NAME) male or female	MALE.....1 FEMALE...2	MALE.....1 FEMALE...2	MALE.....1 FEMALE...2	MALE.....1 FEMALE...2	MALE.....1 FEMALE...2	MALE.....1 FEMALE...2	MALE.....1 FEMALE...2
905 Is (NAME) still alive?	YES.....1 NO.....2 TO 908< DK.....8 TO (2)<	YES.....1 NO.....2 TO 908< DK.....8 TO (3)<	YES.....1 NO.....2 TO 908< DK.....8 TO (4)<	YES.....1 NO.....2 TO 908< DK.....8 TO (5)<	YES.....1 NO.....2 TO 908< DK.....8 TO (6)<	YES.....1 NO.....2 TO 908< DK.....8 TO (7)<	YES.....1 NO.....2 TO 908< DK.....8 TO (8)<
906 How old is (NAME)?	<input type="text"/> <10 TO (2)	<input type="text"/> <10 TO (3)	<input type="text"/> <10 TO (4)	<input type="text"/> <10 TO (5)	<input type="text"/> <10 TO (6)	<input type="text"/> <10 TO (7)	<input type="text"/> <10 TO (8)
907 Has (NAME) ever been married?	YES.....1 NO.....2 TO (2)<	YES.....1 NO.....2 TO (3)<	YES.....1 NO.....2 TO (4)<	YES.....1 NO.....2 TO (5)<	YES.....1 NO.....2 TO (6)<	YES.....1 NO.....2 TO (7)<	YES.....1 NO.....2 TO (8)<
908 In what year did (NAME) die?	1 9 <input type="text"/>	1 9 <input type="text"/>	1 9 <input type="text"/>	1 9 <input type="text"/>	1 9 <input type="text"/>	1 9 <input type="text"/>	1 9 <input type="text"/>
909 How old was (NAME) when he/she died?	<input type="text"/> IF MALE OR DIED BEFORE 10 YEARS OLD GO TO (2)	<input type="text"/> IF MALE OR DIED BEFORE 10 YEARS OLD GO TO (3)	<input type="text"/> IF MALE OR DIED BEFORE 10 YEARS OLD GO TO (4)	<input type="text"/> IF MALE OR DIED BEFORE 10 YEARS OLD GO TO (5)	<input type="text"/> IF MALE OR DIED BEFORE 10 YEARS OLD GO TO (6)	<input type="text"/> IF MALE OR DIED BEFORE 10 YEARS OLD GO TO (7)	<input type="text"/> IF MALE OR DIED BEFORE 10 YEARS OLD GO TO (8)
911 Was (NAME) pregnant when she died, or did she die during childbirth?	YES.....1 TO 913< NO.....2	YES.....1 TO 913< NO.....2	YES.....1 TO 913< NO.....2	YES.....1 TO 913< NO.....2	YES.....1 TO 913< NO.....2	YES.....1 TO 913< NO.....2	YES.....1 TO 913< NO.....2
912 Did (NAME) die within 42 days after the end of a pregnancy?	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2
913 Did (NAME) die due to complications of pregnancy of childbirth?	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2
914 How many children had (NAME) given birth to (before that pregnancy)?	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
914A Has (NAME) ever been married?	YES.....1 NO.....2 TO (2)<	YES.....1 NO.....2 TO (3)<	YES.....1 NO.....2 TO (4)<	YES.....1 NO.....2 TO (5)<	YES.....1 NO.....2 TO (6)<	YES.....1 NO.....2 TO (7)<	YES.....1 NO.....2 TO (8)<

	(8)	(9)	(10)	(11)	(12)	(13)	(14)
903 What was the name given to your oldest (next oldest) brother or sister?	.....	.....	.....	.....	.....	.....	.....
904 Is (NAME) male or female	MALE.....1 FEMALE...2	MALE.....1 FEMALE...2	MALE.....1 FEMALE...2	MALE.....1 FEMALE...2	MALE.....1 FEMALE...2	MALE.....1 FEMALE...2	MALE.....1 FEMALE...2
905 Is (NAME) still alive?	YES.....1 NO.....2 TO 908< DK.....8 TO (2)<	YES.....1 NO.....2 TO 908< DK.....8 TO (3)<	YES.....1 NO.....2 TO 908< DK.....8 TO (4)<	YES.....1 NO.....2 TO 908< DK.....8 TO (5)<	YES.....1 NO.....2 TO 908< DK.....8 TO (6)<	YES.....1 NO.....2 TO 908< DK.....8 TO (7)<	YES.....1 NO.....2 TO 908< DK.....8 TO (8)<
906 How old is (NAME)?	<input type="text"/> <10 TO (2)	<input type="text"/> <10 TO (3)	<input type="text"/> <10 TO (4)	<input type="text"/> <10 TO (5)	<input type="text"/> <10 TO (6)	<input type="text"/> <10 TO (7)	<input type="text"/> <10 TO (8)
907 Has (NAME) ever been married?	YES.....1 NO.....2 TO (2)<	YES.....1 NO.....2 TO (3)<	YES.....1 NO.....2 TO (4)<	YES.....1 NO.....2 TO (5)<	YES.....1 NO.....2 TO (6)<	YES.....1 NO.....2 TO (7)<	YES.....1 NO.....2 TO (8)<
908 In what year did (NAME) die?	<input type="text"/> 1 9	<input type="text"/> 1 9	<input type="text"/> 1 9	<input type="text"/> 1 9	<input type="text"/> 1 9	<input type="text"/> 1 9	<input type="text"/> 1 9
909 How old was (NAME) when he/she died?	<input type="text"/> IF MALE OR DIED BEFORE 10 YEARS OLD GO TO (2)	<input type="text"/> IF MALE OR DIED BEFORE 10 YEARS OLD GO TO (3)	<input type="text"/> IF MALE OR DIED BEFORE 10 YEARS OLD GO TO (4)	<input type="text"/> IF MALE OR DIED BEFORE 10 YEARS OLD GO TO (5)	<input type="text"/> IF MALE OR DIED BEFORE 10 YEARS OLD GO TO (6)	<input type="text"/> IF MALE OR DIED BEFORE 10 YEARS OLD GO TO (7)	<input type="text"/> IF MALE OR DIED BEFORE 10 YEARS OLD GO TO (8)
910 Has (NAME) ever been married?	YES.....1 NO.....2 TO (2)<	YES.....1 NO.....2 TO (3)<	YES.....1 NO.....2 TO (4)<	YES.....1 NO.....2 TO (5)<	YES.....1 NO.....2 TO (6)<	YES.....1 NO.....2 TO (7)<	YES.....1 NO.....2 TO (8)<
911 Was (NAME) pregnant when she died, or did she die during childbirth?	YES.....1 TO 913< NO.....2	YES.....1 TO 913< NO.....2	YES.....1 TO 913< NO.....2	YES.....1 TO 913< NO.....2	YES.....1 TO 913< NO.....2	YES.....1 TO 913< NO.....2	YES.....1 TO 913< NO.....2
912 Did (NAME) die within 42 days after the end of a pregnancy?	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2
913 Did (NAME) die due to complications of pregnancy of childbirth?	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2
914 How many children had (NAME) given birth to (before that pregnancy)?	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

915

RECORD THE TIME

HOURS.....

MINUTES.....



CALENDAR

ONLY ONE CODE SHOULD APPEAR IN ANY BOX.,  
IN COLUMN 1 AND 3 ALL BOXES SHOULD BE FILLED IN.

INFORMATION TO BE CODED FOR EACH COLUMN.

COLUMN 1: Births, pregnancies, contraceptive use

- L LIVE BIRTH
- H PREGNANCY
- K STILLBIRTH/MISCARRIAGE/ABORTION
- 0 NO METHOD
- 1 PILL
- 2 IUD
- 3 INJECTION
- 4 IMPLANT/NORPLANT
- 5 INTRAVAG/DIAPHRAGM/FOAM/JELLY
- 6 CONDOM
- 7 FEMALE STERILIZATION/TUBECTOMY
- 8 MALE STERILIZATION/VASECTOMY
- 9 PERIODIC ABSTINENCE
- T WITHDRAWAL
- N OTHER \_\_\_\_\_

(SPECIFY)

COLUMN 2 : Discontinuation of Contraceptive Use

- 0 INFREQUENT SEX/HUSBAND AWAY
- 1 BECAME PREGNANT WHILE USING
- 2 WANTED TO BECOME PREGNANT
- 3 HUSBAND DISAPPROVED
- 4 WANTED MORE EFFECTIVE METHOD
- 5 HEALTH CONCERNS
- 6 SIDE EFFECTS
- 7 ACCESS/AVAILABILITY
- 8 COST TOO MUCH
- 9 INCONVENIENT TO USE
- F FATALISTIC
- M MENOPAUSAL
- C DIVORCED/WIDOWED
- N IUD EXPELLED
- X OTHER \_\_\_\_\_

(SPECIFY)

T DON'T KNOW

COLUMN 3 : Marriage

- X MARRIED
- 0 UNMARRIED

COLUMN 4 : Breastfeeding

- X BREASTFEEDING
- 0 BREASTFEEDING LESS THAN 1 MONTH
- N NO BREASTFEEDING

		1	2	3	4		
DEC	01					01	DEC
NOV	02					02	NOV
OCT	03					03	OCT
1	SEP	04				04	SEP 1
9	AGT	05				05	AGT 9
9	JUL	06				06	JUL 9
7	JUN	07				07	JUN 7
	MAY	08				08	MAY
	APR	09				09	APR
	MAR	10				10	MAR
	FEB	11				11	FEB
	JAN	12				12	JAN
DEC	13					13	DEC
NOV	14					14	NOV
OCT	15					15	OCT
	SEP	16				16	SEP
1	AGT	17				17	AGT 1
9	JUL	18				18	JUL 9
9	JUN	19				19	JUN 9
6	MAY	20				20	MAY 6
	APR	21				21	APR
	MAR	22				22	MAR
	FEB	23				23	FEB
	JAN	24				24	JAN
DEC	25					25	DEC
NOV	26					26	NOV
OCT	27					27	OCT
	SEP	28				28	SEP
1	AGT	29				29	AGT 1
9	JUL	30				30	JUL 9
9	JUN	31				31	JUN 9
5	MAY	32				32	MAY 5
	APR	33				33	APR
	MAR	34				34	MAR
	FEB	35				35	FEB
	JAN	36				36	JAN
DEC	37					37	DEC
NOV	38					38	NOV
OCT	39					39	OCT
	SEP	40				40	SEP
1	AGT	41				41	AGT 1
9	JUL	42				42	JUL 9
9	JUN	43				43	JUN 9
4	MAY	44				44	MAY 4
	APR	45				45	APR
	MAR	46				46	MAR
	FEB	47				47	FEB
	JAN	48				48	JAN
DEC	49					49	DEC
NOV	50					50	NOV
OCT	51					51	OCT
	SEP	52				52	SEP
1	AGT	53				53	AGT 1
9	JUL	54				54	JUL 9
9	JUN	55				55	JUN 9
3	MAY	56				56	MAY 3
	APR	57				57	APR
	MAR	58				58	MAR
	FEB	59				59	FEB
	JAN	60				60	JAN
DEC	61					61	DEC
NOV	62					62	NOV
OCT	63					63	OCT
	SEP	64				64	SEP
1	AGT	65				65	AGT 1
9	JUL	66				66	JUL 9
9	JUN	67				67	JUN 9
2	MAY	68				68	MAY 2
	APR	69				69	APR
	MAR	70				70	MAR
	FEB	71				71	FEB
	JAN	72				72	JAN

LAST CHILD BORN PRIOR TO JANUARY 1992

NAME: \_\_\_\_\_

MONTH...

YEAR....





